

INTRODUCTION TO THE 1991 EDITION

Twenty Years Later... Seeking a Balanced Viewpoint

Some twenty years ago, I began writing *The Ecology of Freedom* with a very clear purpose in mind: to advance a holistic, socially radical, and theoretically coherent alternative to the largely technocratic, reformist, and single-issue environmental movements that were holding center stage at that time. Thanks to a contract I received from Alfred A. Knopf in 1970 and a modest Rabinowitz Foundation grant, I was able to complete the four opening chapters of this book in 1972. Apart from a few modifications, those chapters remain unaltered from what they were nearly twenty years ago. After various interruptions, I returned to the manuscript as the seventies drew to a close and completed it for publication. In the meantime, the retirement of my original editor at Knopf foreclosed the likelihood that it would be published by that firm, and without ado I turned the manuscript over to a very sympathetic firm, Cheshire Books, which published it in 1982.

I cannot emphasize too strongly that *The Ecology of Freedom* reflects my preoccupation with the rather narrow, pragmatic, often socially neutral environmentalism that held sway two decades ago in a collection of disparate groups. Such environmentalism still, in fact, enjoys pre-eminence today. These groups continue to focus on specific issues like air and water pollution, toxic waste dumps, the chemicalization of food, and so forth—endeavors, to be sure, that I feel deserve our fullest sup-

port. But the views of environmentalists on the causes of, and long-range solutions to, the problems they face seemed—and still seem—to me to be woefully inadequate. Insofar as environmentalists shared a common outlook, it rested on an instrumental, almost engineering approach to solving ecological dislocations. To all appearances, they wanted to adapt the natural world to the needs of the existing society and its exploitative, capitalistic imperatives by way of reforms that minimize harm to human health and well-being. The much-needed goals of formulating a project for radical social change and for cultivating a new sensibility toward the natural world tended to fall outside the orbit of their practical concerns. Lobbying rather than radical politics seemed to embody their social views.

After having been active for decades as an eco-anarchist in fighting pollution, the construction of nuclear power plants, and the chemicalization of food, I decided to write a far-reaching presentation of my views, partly critical and partly reconstructive. In contrast to pragmatic environmentalism, I advanced a comprehensive body of ideas that I call social ecology. For social ecologists, our environmental dislocations are deeply rooted in an irrational, anti-ecological society, a society whose basic problems are irremediable by piecemeal, single-issue reforms. I tried to point out that these problems originate in a hierarchical, class, and today, competitive capitalist system that nourishes a view of the natural world as a mere agglomeration of "resources" for human production and consumption. This social system is especially rapacious. It has projected the domination of human by human into an ideology that "man" is destined to dominate "Nature."

Accordingly, looking back in time to the preliterate "organic society" that existed before hierarchy and capitalism emerged, I explored the nonhierarchical sensibilities, practices, values, and beliefs of egalitarian cultures generally, as well as the social features of organic society, that seemed to be relevant to the development of a radical ecological politics today: the principle of the irreducible minimum, by which organic society guaranteed to everyone the material means of life; its commitment to usufruct rather than the ownership of property; its ethics of complementarity, as distinguished from a morality of command and obedience. All of these principles and values, to my mind, were—and are—desiderata that should find a major place in a future ecological society. I also felt that they had to be integrated with the rationality, science, and in large part the techniques of the modern world, redesigned, to be sure, to promote humanity's integration with the nonhuman world. This selective integration could form the overarching practices of an entirely new society and sensibility.

At the same time, I examined organic society's various religious beliefs and cosmologies: its naturalistic rituals, its mythic personalizations

of animals and animal spirits, its embodiment of fertility in a Mother Goddess, and its overall animistic outlook. I believed that the Enlightenment's battle against superstition had been long since won in American and European culture, and that no one would mistake me for advocating a revival of animism or Goddess worship. As much as I admired many features of organic cultures, I never believed that we could or should introduce their naïve religious, mythic, or magical beliefs or their cosmologies into the present-day ecology movement. Even in the late seventies, I had unnerving suspicions that one could write on ecology and its spiritual implications, as I did, and easily be mistaken for a spiritualist, and similarly even write on sophisticated organismic forms of thought like dialectics and be misread as a mystic.

But little did I realize that, even as I was writing *The Ecology of Freedom*, new ecologies were in fact emerging, principally in the American Sunbelt, that would seek to do exactly what I had tried to avoid. These ecologies began to recycle many beliefs that superficially resemble the kind of ideas I had advanced into a New Age romanticism and produce a mystical ecology that was all but a collection of assorted atavistic religious cults. They now appear under such names as "deep ecology," Earth Goddess worship, and ecological animism, all of which can be generically called "mystical ecology," and they use various New Age ideas, magical rituals, and a wide assortment of religious or quasi-religious practices. Many atavists among these mystical ecologists call for a return to a Neolithic or even Pleistocene "sensibility" and, in extreme cases, literally to prehistoric ways of life. Nearly all of them share a common outlook called "biocentricity," which equates all life-forms—including bacteria and viruses—with one another in terms of their "intrinsic worth". "Biocentrism" is defined in contrast to "anthropocentrism," the largely religious view (as their repeated references to Scriptural texts suggest) that the earth was "created" for human use. Also permeating many mystical ecologies is a preference for "wilderness," as distinguished from humanly altered areas of the planet, and all too often an unfeeling Malthusianism that views famine and disease as "Gaia's" retribution for human intervention into "Nature" as well as for human "overpopulation." Ecofeminism, too, has been transformed from an appreciation of women's historical role in bearing and rearing children into a veneration of women as "closer to nature" than men. Added to this imagery is a belief in an "Earth Goddess" whose worship is expected to transform patriarchal views of women into a theistic "eternal feminine." In short, I began to see a growing array of mystical, romantic, and often downright silly ecologies emerge that now threaten the very integrity of a rational ecology movement. I regard these mystical ecologies as utterly fatuous as they are simply naïve, even when many of them dissociate themselves from the same pragmatic environmentalism of the 1970s that this book criticizes.

Today, attempts to balance reason and technology with organic thinking and spirituality have been virtually subverted by the emergence of mystical, quasi-religious images of nonhuman nature. Indeed, the time when one could use the word "Nature" rather broadly without connoting the crude pantheism of a universal "Oneness" or a strident fetishization of "wilderness" has virtually disappeared. The mischief wrought particularly by "deep ecology," by the misanthropic antihumanism that extends even to a hatred of the Renaissance, by the unfeeling Malthusianism, and by the often self-contradictory notions structured around "biocentrism"—all have now made ecological politics and philosophy into a highly problematic arena.

This introduction is meant to untangle and dissociate social ecology from these various mystical ecologies, and at the same time retain a critical attitude toward pragmatic environmentalism. More emphatically, I wish to correct any affinity the reader may find between social ecology and the various mystical ecologies that are flourishing today. Despite these new circumstances, which social ecology must confront, I strongly adhere to the ideas *The Ecology of Freedom* advances, nor do I feel any need to modify them, apart from explaining certain metaphors that the mystical ecologists have used in conjunction with social ecologists, albeit for very different purposes. What I wish to do in this introduction is to strike a more balanced view of the ideas, interpretations, and data contained in this book. *The Ecology of Freedom* still remains the most comprehensive statement of my ideas and of social ecology generally, and I do not wish to diminish its position in my writings. My work's theoretical arch, if I may call it such, is reared by some nine books, among which *The Ecology of Freedom* may be regarded as the keystone. But I would ask readers of this book to consult some of the other works as well that round out a social ecological perspective, notably *The Rise of Urbanization and Decline of Citizenship*, *Remaking Society*, and *The Philosophy of Social Ecology*.¹ Taken together, these works provide a comprehensive statement of social ecology as it exists today and form a basis for its development in the future.

Lastly, some degree of repetition in preparing this new retrospective introduction is unavoidable. I do not attempt the broad overview of social ecology that appears in the original introduction, a reading of which I regard as indispensable to an understanding of this book, but there are issues that I take up here, like Marxism and ecology, that provide the reader with more detailed explanations of my views. This does not diminish the need to read both introductions: the original, a more elucidatory presentation, and the Black Rose introduction, a more polemical one.

All of my writings are meant to give a coherent view of the social sources of our ecological crisis and to offer an eco-anarchist project to restructure society along rational lines. I use the words *coherent* and *rational* provocatively here, for these terms are anathema to most of the emerging mystical ecologies. Moreover, they are used to challenge a much broader state of mind that has become integrally part of the human condition in the Anglo-American world generally and in many parts of Europe today. Postmodernism, in particular its most vulgar forms, has had a disquieting effect on the need for a coherent and rational body of radical political ideas. With "deconstruction," the claims of reason itself are being dismembered in the name of a passion for "pluralism"—a passion that is understandable in the face of modern totalitarianism but that cannot be justified when it calls any thought-out body of views "logocentric." In this extremely debased form, postmodernism prefixes *logocentric* with adjectives like *white*, *male*, *western*, and *European*, foreclosing all further discussion. I hesitate to predict what new fads are surfacing on college campuses and in the media, even as this introduction is being written.

We are faced with the difficulty that few people seem to know how to build or develop ideas anymore. They promiscuously collect intellectual fragments here and there, like so many dismembered artifacts, drawing upon basically contradictory views and traditions with complete aplomb. Indeed, any serious attempt to rationally discuss the very troubling issues of our time in a coherent manner is often treated as a symptom of psychopathology rather than an earnest effort to make sense of the ideological chaos so prevalent today. Ironically, in its own quixotic way, postmodernism often inadvertently works with a rationality of its own that is nonetheless opaque to itself, and it often strives for the very coherence whose existence it denies to its critics.

The intellectual tendencies that celebrate incoherence, antirationalism, and mysticism are not merely symptoms of a waning intellectuality today. They literally *justify* and *foster* it. The massive shift by many people away from serious concerns with the objective conditions of life—such as institutional forms of domination, the use of technology for exploitative purposes, and the everyday realities of human suffering—toward an introverted subjectivism, with its overwhelming focus on psychology and "hidden" motivations, the rise of the culture industry, and the intellectual anxieties over collegiate issues like academic careers and pedagogical eminence—all testify to a sense of disempowerment in both social and personal life.

That the mystical ecologies are becoming popular today is not a mere intellectual aberration, any more than the popularity of postmodernism. To the contrary, their popularity expresses the inability of millions of people to cope with a harsh and demoralizing reality, to control

the increasingly oppressive direction in which society is moving. Hence myths, pagan deities, and "Pleistocene" and "Neolithic" belief-systems together with their priests and priestesses provide a surrogate "reality" into which the naïve acolyte can escape. Indeed, when this preening emphasis on the subjective is clothed in the mystical vapors and inchoate vagaries of fevered imaginations, any recognition of reality is dissolved by beliefs in the mythic. The rational is replaced by the intuitional, and palpable social opponents are replaced by their shadows, to be exorcised by rituals, incantations, and magical gymnastics.

All of these practices are merely socially harmless surrogates for dealing with the authentic problems of our time. Ghosts from a distant past, the products of our ancestors' own imaginations, in turn, are invoked as objects of our reverence in the name of an "earth wisdom" that is actually as ineffectual as we are in our everyday lives. The new surrogate "reality" that is becoming a widespread feature in our time percolates through the mass media and the publishing industry, which are only too eager to nourish, even celebrate the proliferation of wiccan covens, Goddess-worshipping congregations, assorted pantheistic and animistic cults, "wilderness" devotees, and ecofeminist acolytes—to which I can add a new "deep ecology" professoriat that is increasingly prepared to feed a gullible public with "biocentric" pabulum.

Perhaps the most compelling real fact that radicals in our era have not adequately faced is the fact that capitalism today has become a society, not only an economy. The rivalries, the grow-or-die mentality, and the chaos of the marketplace have percolated from the realms of commerce and industry, which were once largely confined to economic life, into the daily life of familial, personal, sexual, religious, and community relationships. This invasion is reflected by the often unadorned egotism, consumerism, careerism, mutual suspicion, and highly transitory forms of human intercourse, so widespread today. In the decades that followed the end of the Second World War, we have seen a development that has not only produced the anomie of the "lonely crowd"; it has now taken the form of a totally commodified world in which people resemble the very commodities that they produce and consume. Fragmentation has ceased to be a mere malaise and become an ideology, one that conforms with—rather than critiques—the prevailing human condition in the form of a vulgar postmodernism. Present-day antirational ideologies express rather than reject the unthinking and self-seeking "life-world" so frenziedly peopled by the inhabitants of the stock-market floors of the world.

These ideologies, from postmodernism to ecofeminism, serve to subtly enchant the new human commodities with the mental fireworks, amulets, charms, and brightly listed garments that provide them with a mystical patina to conceal their empty lives. Capitalism has nothing

whatever to fear from mystical and "biocentric" ecologies, or their many high-priced artifacts. The bourgeoisie easily guffaws at these absurdities and is only too eager to commodify them into new sources of profit. Indeed, to state the issue bluntly, it is profit, power, and economic expansion that primarily concerns the elites of the existing social order, not the antics or even the protests of dissenters who duel with ghosts instead of institutionalized centers of power, authority, and wealth.

My purpose in developing social ecology over the past decades has been a frankly ambitious one: to present a philosophy, a conception of natural and social development, an in-depth analysis of our social and environmental problems, and a radical utopian alternative—to this day, I do not eschew the use of the word *utopian*—to the present social and environmental crisis. It may be helpful here to single out some issues that should be added to the overview I present in the original introduction.

I shall begin by asking: What is humanity's place in natural evolution? This question is not simply an environmental one; it has far-reaching social and philosophical implications. Human beings and human society in varying respects are products of natural evolution; further, human beings are organized anatomically and physiologically by natural evolution to interact with nonhuman nature productively, as creatures that consciously produce their own means of life with tools, machines, and the organized deployment of their very capacity to labor. As Hegel and radical social theorists of the last century emphasized, humanity's interaction or "metabolism" with nonhuman nature not only provides human beings with the means of life; it *defines* them as—one would hope—increasingly conscious and psychologically complex beings. Humanity's emergence from and continuing daily interaction with nonhuman nature is not only the means by which they maintain themselves materially; it is also one of the major ways they become aware of themselves as individuals and as a very unique species. Call them *homo sapiens*, *homo faber*, *homo economicus*, or what you will, their very humanness and the kinds of societies they create stem in large measure from their efforts to rework nonhuman nature into a habitat where they can live the "good life" and hopefully contribute fruitfully to the enhancement of natural evolution.

Hence, the question of what place human beings occupy in natural evolution raises some of the most fundamental social issues that radical social theorists confront: the ways in which human labor is used, the role of technics in altering the environment as well as in altering the human spirit, the forms of social relations that human beings develop in dealing with nonhuman nature, and—of paramount importance—the ethics they formulate by which they are guided in interacting with the surrounding world.

I shall be careful in this introduction to avoid using the word "nature" without adding an adjective to qualify it. In fact, the greatest confusion has arisen as a result of the many and often-contradictory meanings imputed to the word throughout the course of Western history and philosophy. (I was no less remiss in this regard than others when *The Ecology of Freedom* was completed a decade ago.) In their inventory of "Some Meanings of 'Nature,'" Arthur O. Lovejoy and George Boas list sixty-six definitions, ranging from "birth" to "matter," and we are then told that their list is "doubtless incomplete."² I am no devotee of one-line propositional definitions, but the multiplicity of ways in which the word "nature" has been defined woefully obscures the word's meaning. Judgments about what is "natural" and what is not "natural," indeed about what constitutes the "rights of nature," are a major source of ethical confusion today. This is particularly the case with supporters of "deep ecology," for whom "nature" usually carries the very narrow and particular connotation of "wilderness"—a term that is itself direly in need of explication at a time when human activities have reached directly or indirectly into the most remote areas of the planet so that their impact brings the very notion of "wilderness" into question.

Lest our thinking be frozen by too narrow a notion of "nature" as "primeval wilderness" that a presumably unnatural "humanity" (yet another term that needs clarification) invades and destroys, we must decide what so vague and emotionally highly charged a term means. For in a very broad sense, *everything* is "natural" insofar as it exists—certainly on the subatomic level, be it a plastic table or wolves on the Alaskan tundra. "Nature" defined in this purely materialist sense may be more all-embracing and in its own way more accurate than the narrow or metaphorical uses of the term. But from an ecological viewpoint, so sweeping a definition is simply vacuous and lacks that all-important ethical attribute we call *meaning*.

Viewed from a social and ecological standpoint, "nature"—to social ecologists, at least—is not simply everything that "exists." It is an *evolutionary development*, as I emphasize in the body of this book, that should be conceived as an aeons-long process of ever-greater differentiation: from the primal energy pulse that supposedly gave rise to the "Big Bang," to the emergence of subatomic particles and the forces that bind the universe, to the complex elements that are known to us in the periodic table, to the appearance of all the celestial bodies of which we have knowledge, to the combinations of elements into molecules, amino acids, proteins, and so forth—up to or until the emergence of organic and sentient beings on our planet. Nature, in short, is a cumulative evolutionary process from the inanimate to the animate and ultimately the social, however differentiated this process may be.

Following a tradition that may date back to the beginnings of Western philosophy, *nonhuman* nature can be designated "first nature," in juxtaposition to the *social* nature created by human beings, called "second nature." Social ecology is almost alone these days in dealing with these two developments of "nature-as-a-whole" as a highly creative and shared evolution rather than as an oppositional and purely dualistic antinomy. By contrast, mystical ecologies—with their "biocentric" notions—often disdain the problems of humanity and second nature; indeed, they tend to venerate first nature as "wilderness." These ecologies often view the human species as an evolutionary aberration—or worse, as an absolute disaster, a "cancer" on the biosphere.

What we encounter among mystical ecologies is a crude reductionism that ignores the rich differentiations that biotic evolution has produced and sees instead a univocal "oneness" and "interconnectedness," that visualizes a "whole" without meaningful differentiations. To this reductionism, social ecology opposes a view of an evolutionary dialectic, of development and emergence, of variety and differentiation, indeed, the phasing of first into second nature as a *shared* and *meaningful* process. The word "nature" is deliberately preserved in the concepts of a first and second *nature* to emphasize that both nonhuman and human nature are the product of natural evolution as a whole—not of a Supernature, be it "immanent," as many mystically oriented ecologies would have us believe, or a vague presence in our midst. Even the most ostensibly secular of "deep ecology" writers tend to exhibit a certain amount of religiosity; by definition, in fact, even the most political acolytes of Goddess-worship are implicitly nonnaturalistic, if not explicitly supernaturalistic. The promiscuous use of the word *sacred* to denote natural phenomena in mystical ecologies expresses a belief in the "holiness" of the nonhuman world rather than a sense of wonder. Hence the ease with which these ecologies lend themselves to the sacerdotal and a belief in the divine.

Social ecology, by contrast, contends that if the word *ecology* is used to describe our outlook, it is preposterous to invoke deities, mystical forces to account for the evolution of first nature into second nature. Neither religion nor a spiritualistic vision of experience has any place in an ecological lexicon. Either the term *ecology* applies to natural phenomena *by definition*, or it is a chic metaphor for the disempowered consciousness that fosters mysticism or outright supernaturalism.

Social ecologists use the word *social*, in turn, in a way that is free of the slipshod, often metaphorical confusion that leads to an identification of animal groups, herds, and eocommunities with *society*. It is basic to social ecology that whereas animals form communities, they do not form societies. Society is the exclusive province of humans, for what distinguishes a human society from an animal community is the exist-

ence of social institutions. In this respect, social ecology's anarchistic outlook should be distinguished from that of Peter Kropotkin, who not only used the phrase *animal societies* interchangeably with *animal communities* but believed that they stemmed from a "social instinct." Perhaps—but as we shall see, this instinct was by no means social in a human sense; nor does it accord with what we know about the malleability of human society. Community, in short, may be invoked as a necessary condition for sociality of one kind or another, but it is certainly not a sufficient condition for explaining the existence of society.

And indeed, human societies stand in very marked contrast to animal communities. In the first place, animal communities are relatively fixed; some of the most "social" of animals, such as the bee, behave overwhelmingly in response to the way they are genetically "programmed," and their hives are simply large reproductive communities. By contrast, human societies are structured around highly mutable institutions, be they tribal, slave, feudal, or capitalist in form. Societies have to be defended and preserved with a sense of deliberate purpose. Indeed, where animal communities exist with any degree of permanence, their members exhibit little, if any, conscious intentionality. Human societies, by contrast, are not only highly institutionalized and changeable, but they are clothed in ideologies that may be altered radically depending upon material and cultural conditions, as the histories of all the great revolutions of the past so dramatically reveal.

Social ecology's use of the terms *first* and *second nature* gains particular importance when we examine the specifics of the transition from first to second nature. In tracing the natural transitions from first to second nature, or from nonhuman communities to human society, I have been more disposed to adopt Robert Briffault's thesis of prolonged human infantile dependency and maturation—a development that focuses on primate maternal association—than Kropotkin's proto-sociobiological arguments for a genetically imprinted "social instinct," which is actually absent in many advanced animal species, like leopards, and even in primates like the orangutan.

Moreover, *hierarchy*, a strictly social term, is exclusively characteristic of second nature. It refers to institutionalized and highly ideological systems of command and obedience. Etymologically, the word derives from the ancient Greek term meaning priestly forms of organization. The utmost havoc has been created by anthropomorphically applying the word *hierarchy* to various entities in nonhuman nature. As a social term, *hierarchy* cannot be applied to so-called "dominance-and-submission" relationships among animals, where these truly exist at all. Many allegedly "hierarchical" animal relationships are actually very arbitrary and limited, as I emphasize in the book. They markedly differ

in function from one group of individuals to another within the same species. More important, to apply the term to animal communities divests *hierarchy* of its strictly social character.

Still further havoc has been created by applying the word *hierarchy* to humanity's relationship with first nature as a whole, notably by alleging that humanity "dominates" first nature, or indeed, to explain the interrelationships among mineral, geophysical, and inorganic phenomena generally. Such anthropomorphic projections of specifically intrahuman phenomena are utterly unwarranted. Alas, my repeated objections to the extension of anthropomorphic images from the social world to the nonhuman, in this respect, has been of little avail.

Indeed, I have recently been accused of "hierarchical" thinking simply for noting that humanity has been endowed by natural evolution with a degree of intellectuality, a range of expression, a physical flexibility, and a cultural tradition that is unprecedented in the biotic world. My claim that human beings have the potentiality to bring their consciousness to the service of natural evolution in an ecological society has been regarded by "deep ecologists" as self-serving if not arrogant. Social ecologists, let me note, were among the first to elaborate the concept of hierarchy as a part of radical social theory in the 1960s, and it has since become a cliché that underpins, for example, radical feminist views of female oppression as a transclass phenomenon. That people whose ways of thinking are patently anthropomorphic, such as Goddess worshippers, and whose ways of interpreting the nonhuman world are stridently genderized, now level charges of anthropocentricity against social ecology is a curious and intellectually ungracious phenomenon indeed.

To say that human beings are *more advanced* than other life-forms simply connotes the fact that they are more complex, more differentiated, or more fully endowed with certain valuable attributes than others. Let me emphasize that this fact does not in itself mean that humans establish hierarchical relationships with nonhuman nature. Although we may be a highly complex and subjective group of organisms, we are actually more dependent on the phytoplankton in the seas—very simple organisms—that provide us with much of our atmospheric oxygen, than they are dependent on us. Yet no social ecologist would argue that simply by virtue of our complexity and subjectivity, we somehow *command* those indispensable—if simple—oxygen-producing life-forms. I take this question up in more detail later in this introduction; suffice it to say here that the mere existence of *differences*—including differences of greater or lesser complexity—does not presuppose or imply hierarchy, least of all in relationships between human beings and other life-forms.

As for the cultural evolution of second nature, the opening chapter of *The Ecology of Freedom* draws a sharp distinction between egalitarian

organic societies and hierarchical societies. A plausible case can be made for viewing the earliest human communities as egalitarian, in which differentiations along age, gender, and kinship lines were functionally complementary to each, not based on command and obedience. Organic society is notable for its nonhierarchical outlook toward experience, a sensibility that accepts differences in people such as those of age and gender on their own terms, without ranking them in hierarchical status groups. Organic societies usually cast their institutional arrangements along complementary lines, in which differences among individuals form a *pulvern* of relationship rather than a system of dominance and submission. Such communities are mutualistic or complementary in that they take responsibility for the well-being of all their members, irrespective of their capabilities. Their members respect each other without exercising judgments that cast people in superordinate and subordinate roles.

By contrast, hierarchical societies are distinctly status-oriented in ways with which we are only too familiar at present. Far too many organic cultures slowly began to organize these differentiations along hierarchical lines. After members of organic societies coalesced into status groups that were often based as much on service as on privilege, their age, gender, and familial ties were soon institutionalized into gerontocracies, patriarchies, and military fraternities. In time, these hierarchical arrangements led to the emergence of social and economic elites—and still later, to economic classes and state bureaucracies. The unity that once marked the emergence of second nature gave way to clashes of interests that sharply pitted human against human, ending the primal but innocent unity of early egalitarian groups.

Hierarchy emerged primarily as an *immanent* development within society that slowly phased humanity from fairly egalitarian relationships into a society institutionalized around command and obedience. The chapter "The Emergence of Hierarchy" traces a logical and anthropologically verified development toward a complex hierarchical society, from gerontocracy, through patricentricity, shamanistic guilds, warrior groups, chiefdoms, and finally to statelike formations, even before classes began to emerge. All of these hierarchical strata interacted in highly complex ways, reworking the biological facts of life, like age and gender, into distinctly institutional forms. Status innovations were permeated by certain honored traditions that had shaped organic society in order to render hierarchy more socially acceptable to dominated people, and eventually to ingrain them as inevitable in the popular mind.

Hierarchy, clearly, has taken many forms that nonetheless share a common feature: they are organized systems of command and obedience. Despite their multiplicity of forms, it is crucial for students of society to fully understand these forms and to eliminate hierarchy per

se, not simply replace one form of hierarchy with another. The dialectical unfolding of hierarchy has left in its wake an ages-long detritus of systems of domination involving ethnic, gendered, age, vocational, urban-rural, and many other forms of dominating people, indeed, an elaborate system of rule that economic "class analyses" and strictly antistatist approaches do not clearly reveal. If human freedom is to be definitively achieved, this detritus must be exposed and understood in all its complexity and interactions.

It will do us little good to contend that all the evils in the world stem from a monolithic "patriarchy," for example, or that hierarchy will wither away once women or putative "female values" replace "male supremacy" and its "male values." Indeed, hierarchical domination would scarcely be dented if the "revolutionary" call of one leading feminist, Susan Brownmiller, were heeded. "I am not someone who employs the word revolutionary lightly," Brownmiller has written, "but women's total integration into the police forces—and by total I mean 50/50, not less—is a revolutionary goal of the highest importance for the rights of women." One can only pause with astonishment at such a naïve and breathtakingly regressive demand. There is no reason to believe that a gender-integrated police force—or for that matter a gender-integrated army, state bureaucracy, or corporate board of directors (given the very nature of these institutions as inherently hierarchical) would lead to rational and ecological society.

Nor do we gain an understanding of the emergence of patriarchy—more properly, patricentricity, a social orientation that privileges males—to contend, as do many ecofeminists, that hierarchy emerged when a caring, loving, tender "matricentric" village world in the early Neolithic was suddenly swept away by a cavalry invasion of Indo-European patriarchal warriors. That invasions played a role in transforming organic into hierarchical society is a fact I would be the last to deny. But to use invasions almost exclusively to explain this development, as certain ecofeminists do, raises the question of why the invaders themselves were hierarchical. Nor can the emergence of patricentricity be explained by an invasion that presumably occurred in one part of the world while it developed in many remote cultures that could never have had any significant interaction with one another. So simplistic an "explanation" beggars credulity and does violence not only to the ways in which cultures affect one another but runs counter to the historical facts as we know them today. Here, Janet Biehl's examination of ecofeminists' exaggerated accounts of Indo-European or "Kurgan" invasions greatly illuminates these issues.¹

The complex dialectic of hierarchy in *The Ecology of Freedom* challenges not only the simplifications introduced by mystical and ecofeminist

ecologies into the problems of domination but also brings into question the one-sided economic simplifications that are rooted in traditional Marxian class analyses. I do not wish to diminish the importance of class rule in explaining present-day ecological problems, but class rule must be placed in the much larger context of hierarchy and domination as a whole.

If the so-called "materialist conception of history" has made any headway in the environmental movement, it is largely due to the fact that certain Marxists today hold a very elastic notion of Marx's own writings. Marx himself defined class in two distinct senses. The first was essentially negative: "In so far as millions of families live under economic conditions that separate their mode of life, their interests and their culture from those of other classes, and puts them in harsh opposition to the latter," he wrote in *The Eighteenth Brumaire of Louis Napoleon*, "they form a class." What makes this definition a negative one is that it crudely presupposes what it is meant to explain. In *The German Ideology*, however, Marx and Engels defined class in a more positive or substantive sense. Here class is seen as originating as a result of a growing division of labor, leading to the patriarchal family, slave society, feudalism, and of course capitalism. It is crucially defined in terms of the ownership of property—be that property women, children, slaves, serfs, capital, or the labor-power of the proletariat that the bourgeoisie buys on the labor market.

Class is thus essentially tied to property, even when property is owned or managed corporately—be it by an elite of free citizens in the ancient world, by feudal lords in the medieval world, or by stockholders in the modern world. Basically, a class nexus is formed by who owns or controls what and whose labor is being exploited economically. If classes can be said to be structured around the ownership and control of property, hierarchies constitute much subtler and more elusive phenomena, based not only on biological facts like age, gender, and kinship differences, for example, but also on social facts like ethnocentricity, bureaucratic control, and national origin. These "facts" are not marked strictly by economic or by exploitative functions. Indeed, the attainment of status and prestige may even involve giving one's property away to the point of sheer destitution, as in the potlatch ceremonies of the Northwest Indians.

Marx elaborated a wealth of social and economic ideas over his huge corpus of writings, but the economic basis of his social view has proven to be rather simplistic. Nor can the economic basis of his definition of class be sloughed off by adorning it with all kinds of cultural traits. The subtleties of Marx's notion of alienation and reification, so inspirational to the modern-day neo-Marxist theorists, can never be separated from his overwhelming preoccupation with the labor process and

with the commodity as a good produced for exchange—or, more fundamentally, his view of the proletariat's hegemonic role in changing society, a notion that has patently come to grief in our own time.

But the economic basis of class, especially the control and use of surplus labor, is particularly important in terms of the sweeping historical drama that Marx inherited from the Enlightenment. For it rests squarely on the Marxian notion that first nature is above all a "realm of necessity," of inevitably scarce raw materials, that must be painfully extracted, reworked, and finished into useful things by human labor. Traced back to the biblical myth of "original sin," this drama casts first nature in the role of a "stingy," "intractable," and ungiving domain, one that labor must in some sense "tame" or, at least, endure as a form of "punishment" for the malfeasances of Adam and Eve. Nineteenth-century economics added a fatalistic touch of its own to this theological drama by literally defining itself as the study of scarce resources versus unlimited needs—hence, the contemporary reputation of economics as the "dismal science."

Marxism radically secularized this myth and extended it to encompass the whole tableau of human history. Once classes arose, according to Marx, they acquired their *raison d'être* because the ultimate historical goal of providing the "good life" for humanity required the domination of first nature. The domination of first nature, in turn, required the mobilization of labor by a privileged, indeed supervisory, class of rulers and exploiters. The exploitation of human beings in the process of production—indeed, the use of human bodies as machines—was thus, for Marx, the earliest technical step toward bringing first nature into the service of humanity, whose liberation was to be definitively completed with the achievement of communism.

Laudable as Marx's ultimate goal may have been, no more plausible apologia for the existence of class or state rule has ever appeared over the course of history, and few have provided better excuses for domination than this one. For what made Marx's version of this dismal drama unique was that he turned it into a heroic epic: once first nature was mastered, dominated, and freely opened to "exploitation," there would be no reason for the continued existence of classes and states. As a result of a proletarian revolution, "humanity" would come into its own as the fulfillment of all its caring, intellectual, and artistic potentialities.

I do not propose to dwell on all the aspects of this simplistic drama. Social ecology's "drama" is fundamentally different from those of both biblical precept and Marxian socialism. First nature is neither stingy nor intractable. Rather, conceived as a *developmental* process—as distinguished from the static, picture-postcard scenic view of "wilderness" that often passes for "nature" in "deep ecology"—it is extraordinarily fecund, marked by an increasing wealth of differentiation, neural complexity,

and the formation of diverse ecological niches. To be sure, the planet does contain some places that are unusually inhospitable for life. But first nature can be regarded as a harsh "realm of necessity" mainly in terms of the senseless "needs" it is expected to satisfy. Should these needs become extravagant or utterly irrational, first nature's fecundity might seem to shrink, relative to the needs with which it is burdened. This would clearly be the case if one's interpretation of the "economy of nature" were saddled with the concept of "insatiable wants" that always confront limited resources, a concept that is regrettably implicit in Marx's discussion of needs in volume three of *Capital*. Certainly, among human beings, "needs" are so highly conditioned by society that they must be dealt with as social issues, not simply as matters of geophysics or population numbers. Suffice it to say here that evolution is an ever-differentiating process in which increasingly complex organisms emerge from relatively simple ones—a process in which life, generally speaking, becomes ever more complex, ever more neurally flexible, and increasingly differentiated, despite the tendency of many species to become overly specialized and captive to limited ecological niches.

The view of first nature as intractable or "stingy" thus stands at odds with social ecology's emphasis on the variety and multitude of life-forms we encounter in the fossil record and the world around us. That living things eat or are eaten, that they suffer pain through accidents, as prey, or in struggles for survival—all of which exposes them to selective processes that determine whether they will continue to live or disappear—is not a debatable issue in social ecology's view of first nature. Following very much in the tradition of Peter Kropotkin's *Mutual Aid*, however, social ecology also emphasize that the survival of living beings greatly depends on their ability to be supportive of one another. This "mutual aid," to use Kropotkin's word, and particularly the process of differentiation and the variety of habitats that evolution creates, opens new avenues of biotic development for existing or emerging species. Depending upon the extent to which life-forms develop neurologically, they are capable of making rudimentary choices in adapting to new environments or in actually creating new niches for themselves.

Increasing subjectivity turns organisms into an active force in their own evolution, not merely the passive objects of natural selection. Their survival and development now begins to depend upon the rudimentary judgments they make in interacting with and altering their own environments. They begin to make choices—indeed, at times, fairly complex ones—and exhibit a dim form of intentionality that we can properly associate with rudimentary forms of freedom. Looking back over time, it is fair to say that natural evolution is not the narrow, restrictive "realm of necessity" that Marx designated as nature, but rather a highly fecund

development that exhibits a striving toward consciousness and freedom, however dim these qualities may seem even in highly complex nonhuman organisms.

I am not making the contention that there are predetermined ends or a *telos* in natural evolution that guides life's development inexorably toward consciousness and freedom. But I would insist that the *potentiality* for achieving consciousness and freedom does exist. The reader is welcome to regard this development as a mere tendency, as a reasonable likelihood, or simply as a blunt fact supported by the fossil record, not as a supposed "law of nature." In any case, a rich tradition exists in Western philosophy that describes a subtle grading of life from fairly simple life-forms to the emergence of complex sentient beings—beings that also *change their environments to meet their own survival needs*. From the minimal notion of organic self-maintenance, I believe that we can plausibly argue that a *nissus* exists that leads from passive reaction to active interaction, from intentionality to choice, and finally to conceptual thought and foresight. I call this approach to evolution *dialectical naturalism*, in order to distinguish its processual dialectic from the fairly mechanistic "laws" of dialectical materialism advanced by writers like Frederick Engels and from the dialectical idealism of Fichte and Hegel.

Finally, natural evolution has indeed produced beings—human beings—who can act rationally in the world, guided far less by instinct than by a rich intellectuality rooted in conceptual thought and complex forms of symbolic communication. These beings are *of* the biotic world as organisms, mammals, and primates, yet they are also *apart* from it as creatures that produce that vast array of cultural artifacts and associations that we call second nature.

Second nature consists largely of the tools that the earliest humans developed over a span of a half-million years or more, the habitats they willfully created for their security and well-being, and the organized social life that they institutionalized as families, then bands, tribes, hierarchies, classes, and the State—and finally, such cultural achievements as philosophy, science, technics, and art. This cultural development is uniquely human. Not only are human societies composed of definable but mutable institutions that have changed radically over the course of social history; they include equally definable but mutable ideologies that rationalize the existence of various institutions, a richly elaborate culture that finds its expression in a wide-ranging symbolic language, and a written historical record—all of which have no precedent in the non-human world.

Even more unprecedented is the extent to which second nature changes first nature. Sweeping changes, of immense significance, were

often produced, moreover, by aboriginal peoples, albeit on a scale that was greatly exceeded by so-called "industrialized" ones. I shall examine changes made by aboriginal societies at a later point in this introduction. What is important to note for the present is that second nature can be distinguished from first nature not because human beings are less "animalistic" than nonhuman beings, but quite to the contrary, because it is *part of their very animality to seek these changes—as would any living thing if it could*. People change first nature by virtue of their *naturally* endowed capacities to think conceptually, to create extrabiological tools and machines, and to do this with a high degree of collective organization and intentionality that is profoundly different from the behavior and abilities of nonhuman beings. Not only are these unprecedented human survival capacities a product of natural evolution, they open a still newer realm of potentiality—the potentiality to evolve along *social* lines and produce a second nature that profoundly affects the evolution and life-forms of first nature.

Once human society finally emerges as a distinct worldwide phenomenon, it becomes meaningless to speak of ecological issues in strictly biological terms. Indeed, like it or not, nearly every ecological issue is also a social issue. In fact, as we shall see, nearly all our present-day ecological dislocations have their basic sources in social dislocations. Hence my conviction that a serious environmental movement today must be based on *social* ecology if it is to be intellectually consistent, insightful, and environmentally relevant.

I say this provocatively at a time when a huge literature has surfaced that tries to refocus public attention away from social issues and toward socially neutral phenomena like technology *as such*, rather than the social matrix of technics; toward science *as such*, rather than the social abuses of science; and toward reason *as such*, rather than the reduction of reason largely to a means-ends "skill" to be used for instrumental ends. Permeating these rather simplistic efforts to direct public attention away from the social underpinnings of our ecological problems is that same, ubiquitous mysticism and theism that, in an era of social disempowerment, foster a proclivity for supernatural escape. Among ecological radicals, confrontation with the stark problems of the warming of the planet, the thinning of the ozone layer, and other effects of growth produced by capital accumulation is slowly giving way to atavistic celebrations of a mythic Neolithic and Pleistocene. As this rubbish sediments itself into the ecology movement, even confrontation itself is denounced as "divisive" and "disruptive."

Yet rarely have the very real divisions and disruptions in second nature been more in need of being confronted than they are today, when the very survival of our biosphere is in question. Nor can we ignore the deep-seated divisions in society that came into existence with hierarchies

and classes. One can no longer speak of "humanity" the way one can speak of species of carnivores or herbivores—that is, as groups of fairly uniform biological beings whose individuals are essentially alike. To use such ecumenical words as *humanity*, *we*, *people*, and the like in a purely biologicistic sense when we discuss social affairs is grossly misleading. Although human beings are certainly mammals no less than bears, wolves, or coyotes, to ignore the hierarchical and class divisions that second nature has produced in their midst is to create the illusion of a commonality that humanity has by no means achieved. This ecumenical view of the human species places young people and old, women and men, poor and rich, exploited and exploiters, people of color and whites *all* on a par that stands completely at odds with social reality. Everyone, in turn, despite the different burdens he or she is obliged to bear, is given the same responsibility for the ills of our planet. Be they starving Ethiopian children or corporate barons, all people are held to be equally culpable in producing present ecological problems. Ecological problems, in effect, are *de-socialized* and restated in genetic, psychological, personal, and purely subjective terms so that they no longer have political or economic content. Not only does this almost conventional approach sidestep the profoundly social roots of present-day ecological dislocations, it deflects innumerable people from engaging in a practice that could yield effective social change.

The tendency of mystical ecologists to speak of the ecological crises that "we" or "people" or "humanity" have created easily plays into the hands of a privileged stratum who are only too eager to blame all the human victims of an exploitative society for the social and ecological ills of our time. Political myopia of this kind and the social insensitivity it breeds is worse than naïve: it is blatantly obfuscatory at best and utterly reactionary at worst.

Accordingly, given the emergence of hierarchy and domination, the divisions that beset society are crucially important issues that the modern ecology movement must sternly confront and challenge. I must emphasize that we have to know *how* hierarchy arose if we are to undo it. We must explore the extensive nature of domination in all its ramifications if we are to remove the pathologies of second nature—which we certainly cannot do unless we transcend naïve "biocentric" views that equate humans with mosquitoes in terms of a shared "intrinsic worth," whatever that expression may mean. Without a clear insight into the nature of hierarchy and domination, we will not only fail to understand how the social and biotic interact with each other; we will fail to realize that the very *idea* of dominating first nature has its origins in the domination of human by human, and we will lose what little understanding we have of the social origin of our most serious ecological problems.

By the same token, we will grossly distort humanity's potentialities to play a creative role in nonhuman as well as human development. We will deprecate the fact—and such deprecation is already very chic among the theorists of "deep" ecology—that the human capacity to reason conceptually, to fashion tools and devise extraordinary technologies, indeed, to communicate among themselves with a symbolic linguistic repertoire—all can be used for the good of the biosphere, not simply for harming it. What is of pivotal importance in determining whether human beings will creatively foster the evolution of first nature or whether they will be highly destructive to nonhuman and human beings alike is precisely the kind of society we establish, not only the kind of sensibility we develop.

Which is not to say that in an ecological society the lion will lie down with the lamb or that the biosphere will be sedated into loving quietude with the balm of human kindness. But first nature can indeed be rendered biotically more fecund for nonhuman as well as human life, and the intervention of an ecologically oriented human rationality and technics could foster many evolutionary advances—advances that would diminish the damaging effects of the harmful accidents and chance events that can occur when evolution is left to "Mother Nature" alone. Again, depending upon the kind of society we produce, a new realm of possibility may emerge in which blind necessity can be softened by clear-sighted rationality, and needless suffering can be diminished by human concern and care.

Is this an argument for the belief—imputed by many "biocentric" ecologists to social ecology—that the human species is "superior" to or "higher" than all other life-forms? That humans can "dominate" the biosphere? The use of the words *superior* and *higher* is willfully pejorative when they are applied by "biocentrists" to social ecology. If the terms are used to assert humanity's claim to a "higher rank, station, or authority," to cite the preferred dictionary definition of *superior*, any imputation that social ecology holds such a view is either the result of ignorance or is simply dishonest. For my own part, nowhere in any of my writings do I use the word *superior* to denote humans' relationship to nonhuman beings. That human beings differ significantly from nonhuman beings, however, is a fact that even the most naïve mystics are obliged to acknowledge, short of losing all contact with reality.

Given the constellation of differences that distinguish human from nonhuman life-forms, indeed, differences that have been produced by natural evolution itself, it is fair to say that some species are more flexible than others in their ability to adapt and that they possess more complex nervous systems that endow them with the capability to make more suitable choices from among evolutionary pathways that promote their survival and development. In short, they can be said to be more ad-

vanced in dealing with *new* situations than are other, less flexible and less neurologically developed species. But in no sense does it follow that a more advanced life-form will or must dominate less advanced life-forms. The notion that a more advanced life-form is more "domineering" is a thoroughly anthropomorphic image; it reflects elitist ideologies that justify domination, not relations that necessarily must exist in the natural, or for that matter in the social, world. It is a characteristic instance of the many ideologies of domination that have been projected onto first nature to establish, among other things, command and obedience as *immutable* facts of life. Indeed, one can argue that to the extent that human society becomes more rational, eliminates classes and hierarchies, and undergoes changes in sensibility that are marked by a deep respect for life, the less likely it is that terms like *superior* and *higher* will even have meaning to people, be it in their relationships with one another or in their relationships with other living beings. Indeed, the more fully developed humanity is, its spiritual and intellectual equipment refined by a rational culture, the more sensitive it will become in its view of, and concern for, nonhuman nature.

Because greater reason, science, technology, even knowledge and talent have been historically yoked to the service of hierarchical rule, it seems to follow for many ecologically oriented people that they are antithetical to freedom, care, and an ecological outlook. We quail before words like *technology*, *science*, and *logic* as if they were totally autonomous, reified forces that have an oppressive character in every social context, irrespective of their ethical underpinnings. That animals more advanced than others need not—and actually *do not*—"dominate" less advanced beings seems to totally elude adherents of mystical ecology and its theistic and "deep" offshoots.

Here we arrive at one of the most hotly debated—and at the same time one of the most sophistic—issues in ecological philosophy today: the notion that "intrinsic worth" is equally distributed among all species. Where social ecology sees advances in evolutionary development, "biocentric" proponents of "intrinsic worth" see merely a scattering of morally equatable attributes among species, such that the "rights" of viruses to "self-fulfillment" can be equated with similar "rights" of grizzly bears, or such that the "rights" of grizzly bears can be equated with those of human beings. All, presumably, can be said to possess equal "intrinsic worth." The obfuscations that these "biocentric" illusions and their misanthropic implications have introduced into present-day ecological thinking can hardly be underestimated.

First nature may reasonably be regarded as the *ground* for an ecological ethics or, if you like, as the necessary condition for moral behavior. Social ecology, by conceiving first nature as an evolutionary

tendency toward greater subjectivity, sees in the achievement of a rational, self-conscious, and relatively "free nature" the establishment of an ecological society. But as I have often argued, first nature in *itself* is not ethical. "Mother Nature," or whatever gendered kinship tie one may wish to assign to the planet, does not always "know best," as the fossil remains of many remarkable but extinct species attest. In fact, it is doubtful that "she" knows anything at all, as even James Lovelock, the co-artificer of the so-called "Gaia hypothesis," attests. If one notes, for example, the amazing similarity between the stalking behavior of a house-bred cat that has never eaten anything but canned cat-food and that of a lioness on the African plains, one may reasonably question whether even fairly advanced animals "know" much beyond what is imparted to them by their instincts and the rudimentary survival skills that they acquire from the very demanding challenges of eating and risking being eaten. Although the versatility of animal behavior should not be downplayed, whatever most animals learn or "know" is usually limited by simple everyday experience and their relatively restricted forms of communication.

As far as *ethical* issues are concerned, however, no animal or plant species has ever formulated a "social contract" with a mutual recognition of individual rights and duties, however complex their interactions may be. Despite the beliefs of writers like Kropotkin, who saw mutualistic relationships among life-forms as harbingers of ethical behavior, those relationships are not usually conscious ones. Much less do they consist of the conscious responsibilities and the reasoned behavior we call ethical. Indeed, the notion of "intrinsic worth" in nonhuman nature is simply an oxymoron. Human beings may have a deep sense of care, empathy, indeed of love for other life-forms, but for them to regard any ethical principle as *inherent* in first nature is as naïve as the medieval practice of judicially trying and hanging captive wolves for their "criminal" behavior.

For better or worse, human beings are the *sole* ethical agents that exist. Ethics as such literally appeared on the planet with the emergence of human beings in the course of evolution, just as life as such appeared with the emergence of proteins that engaged in metabolic and reproductive activity. Humans—and humans alone—institutionalize their own behavior into relationships that are clearly predicated on acknowledged rights and duties, on rationally justified ethical responsibilities. As I show in this book, human ethical systems have been variously backed up by custom, or traditional forms of behavior; by morals, or behavior conducted by commands; or by reason or logical and conceptual thought.

But even if we grant that these forms of behavior differ considerably, humans have been entirely alone in the world as ethical agents,

just as they have been alone in forming mutably institutionalized societies and the ideologies needed to support or change them. First nature is never "cruel" or "kind," "heartless" or "caring," "good" or "bad." Ethics, in effect, was born with human society, just as surely as metabolism was born with the emergence of life. The "intrinsic worth" or whatever other kind of value we impute to animals are a product of human artifice that we project upon a world that in fact has no "inherent" values, just as in our fairy tales we project speech and human intentions onto "bad" wolves, "shy" pigs, and "sly" foxes.

The same is true of the the "rights" that "biocentrists" attribute to life-forms in the name of "intrinsic worth," not to speak of streams, rocks, forests, mountains, and so forth. "Rights" are never spontaneously generated in first nature; nor is there the least evidence that flora, fauna, and rocks "claim" them, either for themselves or for others. Many animals exhibit care for each other, particularly in maternal-offspring relationships among advanced life-forms. But "Mother Nature" is singularly uncaring taken as a whole and is clearly bereft of ethical obligation. Much as we may want to metaphorically people the world with "immanent" or "transcendental" deities that anthropomorphically reflect our conceptions of ourselves and the kinds of communities we would like to develop, first nature still remains a realm of ethical vacuity.

This vacuity can only be filled by the rights and obligations that humans consciously deliver to it. Any "worth," "value," and "rights" that exist in first nature are *conferred rights*—rights that human beings alone confer on animals, plants, rocks, streams, and the like. "Rights" cannot be derived from a mystical notion of "intrinsic worth" that simply has no meaning outside of human agency; nor have they ever preceded the appearance of humanity in natural evolution.

Nor can it be argued that the life-forms in first nature are suffused with mutual "respect" for one another. No nonhuman organism "respects" "Mother Nature"—or even knows that "she" exists as anything more than a habitat. In fact, each animal species simply tries to survive. It has no evident regard for the "worth," intrinsic or otherwise, of its environment or of the other life-forms that inhabit it. Wolves would devour the last caribou alive if they were hungry, and ungulates would nip away the last remaining patches of vegetation on earth if they required food. We would be hard put to explain the tremendous trail of species extinctions from Cambrian times, some half-billion years ago, up to the Pleistocene Epoch, were it not for the fact that predation as well as geophysical factors drove countless life-forms out of existence with no evidence of mutual "respect," "Earth wisdom," or a sensibility based on "intrinsic worth."

I am not arguing that we should *not* confer rights—possibly even judicial ones, as Justice William O. Douglas tried to do—on nonhuman

species, or even on forests, streams, and certain geological formations, for that matter. From a practical standpoint, doing so might be an invaluable way of conserving and expanding ecocommunities that we should preserve for a good many reasons that I need not discuss here. But the fact that a highly perverted society has shown little willingness to respect the nonhuman world should not be used as the basis for defaming the one life-form—human beings—that alone is *capable* of even thinking, discussing, and with the needed social changes, effectively conferring rights on first nature. Whatever rights or other ethical formulations that we develop in an ecological ethics, the fact remains that we as a species are the sole ethical agents on the planet who are able to formulate these rights, to confer them, and to see that they are upheld. Whether these rights are formulated and upheld, I must insist, depends overwhelmingly upon the kind of society we create and the sensibility it fosters—not by mystifying a remarkably unknowing or “indifferent” “Mother Nature,” or believing in an “Earth Goddess” who has no more reality than the anthropomorphic fables of Mother Goose.

Insofar as human beings alone have an unprecedented capacity to create ethical systems that impart worth to other life-forms, they clearly have a *special* worth in their own right. Insofar as they are capable of being fully conscious of their behavior and its ecological impact. They are extraordinary beings in the biosphere, for no other life-form has this remarkable consciousness. The new misanthropic indulgences that grossly undervalue human beings by claiming that “Gaia” can thrive without them are as stupid as they are despicable. This claim strips organic evolution of any meaning whatever beyond mere survival, of any exultation in the natural emergence of attributes like conceptual thought and symbolic language. By placing the capabilities of human beings and their intellectuality on a par with animal skills for survival, “biocentrists” utterly denigrate that unique species, as well as intellectuality itself. With so limited and reductionist an interpretation of life, one might well wonder why “Gaia” itself should be cherished amidst the cosmic swirl of marvelous galaxies and celestial bodies.

The insidious devaluation of human achievements promoted by mystical ecologies is accompanied by a hatred of all that is specifically human: a hatred of reason, science, art, and technological innovation in almost all its forms. To claim, as one “deep ecologist” has recently done, that the human mind is morally comparable to the “navigational skills of birds, the sonar capability of dolphins, and the intense sociality [!] of ants” is to ignore the fact that the human mind knows more about the specific attributes of these animals than do the animals themselves. Moreover, humans, by virtue of their intellectuality and technical abilities, have the capability of understanding these attributes to the point that they can invent ways to duplicate them and even surpass their

range. Underlying our "deep ecologist's" judgment—or lack thereof—is a fashionable disdain for the potentialities and creativity of mind, a disdain that has its social roots in an Anglo-American tradition of empiricism, the prevailing mystical Zeitgeist, a privatistic reaction to an increasingly overbearing society, and an emerging temper of self-hatred that is projected onto human life itself with a predictable, compensatory "reverence" for nonhuman nature.

If one grants that ethics is an eminently human creation, that human beings can add a sense of meaning to first nature by virtue of their interpretive powers, that they can confer values as well as create them, then humanity is literally the very *embodiment* of value in nature as a whole. However much "Gaia" might be able to survive without the existence of human beings, such a "Gaia" would have no more ethical meaning or value in the scheme of things than a meteorite. As the embodiment of value, indeed as the very source of value, a human life can no more be placed on a par with the life of a grizzly bear or a wolf than the lives of these admirable animals can be placed on a par with the existence of an inorganic entity like a rock. For with the disappearance of human beings, *value too would disappear*, and the biosphere would be left with no basis for any ethical evaluation or discussion of "intrinsic worth," much less ethical agents who can appreciate its wondrous qualities. Hence the exceptional importance of human life, even by comparison with the "noblest" of all other life-forms.

Let me stress once again that in no way does this valuation of human life contradict an ethics of complementarity. An ethics of complementarity opposes any claim that human beings have a "right" to dominate first nature, assuming they could do so in the first place, much less any claim that first nature has been "created" to serve human needs. But such an ethics does place a high premium on a rich diversity of life that makes for *wholeness*, for evolutionary and rational *innovation*, and for a *heterogeneity* of life-forms, if only to make *complementarity* possible. As an ethics that values the emergence of new attributes implicit in life, such as greater flexibility of adaptations to new environments, it gives due recognition to more advanced degrees of sentience, and, if you please, the exercise and joys of mind, self-consciousness, and freedom; but in no sense does it place these attributes of life in any hierarchical system based on command and obedience.

A world reduced to Lynn Margulis's soup of prokaryotic cells or to Starker Leopold's admittedly illusory version of a "primitive" American habitat in Yellowstone Park would indeed be "alive," but it would be little more than that. It would lack humanity's ability to appreciate it, to give it the splendor of meaning, to enrich it with interpretation—indeed, even to create illusions of its "sacredness." In the absence of human beings, reality would be denied the rich sense of wonder so

characteristic of mind and a sensibility that could bring mind to the service of fostering the very "interconnectedness" so celebrated by mystical ecologists.

Herein lies the extraordinary value of human life in relation to other forms of life—namely, its ability to value phenomena and evolution in any broad ethical sense. If the reader chooses, as our "deep ecologists" do, to respond to my humanistic observations by sneeringly asking, "Who says so?" I can only reply that their very ability to ask such questions is evidence of the view I have advanced.

If we are of the natural evolution that produced us, yet also apart from it, in what ways should we deal with that "apartness"?

Mystical ecologists would like us try to overcome human "apartness" by minimizing or eliminating it altogether. It has become all too fashionable among many mystical ecologists to condemn human intervention into first nature, except to meet the minimal needs of life and survival. We are enjoined to "let nature take its course," to avoid any alteration of first nature except for what is "necessary"—a word that often remains ill-defined—to keep human beings alive and well. Such noninterventionist attitudes are commonly imputed to prehistoric and aboriginal peoples, who presumably lived in total "Oneness" with first nature and the wildlife around them. Taking Aldo Leopold's phrase "not man apart" to its most extreme conclusion, mystical ecologists call for a complete integration to first nature—by "returning to the Pleistocene," as many "biocentrists" demand.

But these calls present us with a host of vexing problems. In the first place, the Pleistocene was not the Paleolithic, (although they are often grouped together for geological convenience); hence we are talking of diverse sensibilities and cultures. It was not until the late Pleistocene that the vocal anatomy of *homo erectus*, a direct ancestor of our species, allowed for speech; before then, any "deep ecologists" who hoped to return to that epoch would have been confined to grunts and growls. Nor was it until the late Paleolithic that human beings like ourselves—*homo sapiens sapiens*, who had modern-type anatomies and brains—emerged. The families and communities of the hunting-gathering foragers who lived in the glacial and interglacial periods of the Pleistocene were equipped with little more technology than spears, fire, crude stone scrapers, and the like for hunting animals and cleaning their hides—a technics that would exclude the word processors to which many "deep ecologist" writers are avowedly attached. Disturbingly, we know that *homo erectus*, direct ancestors of our own species who lived in the late Pleistocene, were probably cannibals who ate members of their own species—possibly, but not necessarily, for ritualistic reasons.

These forebears of our species and our own ancestors lived in a climatically turbulent era, marked by advances and retreats of glaciers, wide swings in temperature, and a feast-or-famine diet. Their lives were often very precarious, despite the periodic abundance of game. Nor were they fully equipped with the means to deal with the natural vicissitudes that white middle-class people today take so readily for granted, such as the certainty of warmth in cold weather, adequate shelter, and the ordinary creature comforts to which middle-class people are wedded—leaving all luxuries and pleasures aside. They lacked a written body of knowledge by which a complex tradition of ideas could be handed down; the writing materials with which to express thoughts and reflections that were more complex than those involved in meeting the needs of everyday life; the libraries in which to meditate, research, and gather the wisdom of past ages—in short, the vast array of intellectual and spiritual materials to sensitize their outlook and sensibilities.

It might seem more plausible for "deep ecologists" to call for a return to the *sensibility* of these distant times, rather than an actual physical return. But here too we are besieged by a barrage of unanswered questions. We would want to know what kind of sensibility Pleistocene and Paleolithic hunters had in their dealings with the multitude of animals they encountered in the "Great Age of Mammals," as the two periods have been called. After all, Paleolithic hunter-gatherers developed the stone-tipped spear, the all-important spear-thrower—which made it possible to effectively pierce very tough hides and muscles—and the bow and arrow, which could inflict mortal damage over a sizable distance. The more sophisticated and lethal their hunting kit, the greater an impact these humans must have had on the large mammals of the late Pleistocene and the Paleolithic. If we are to return to the sensibility of these epochs, we would want to know if they really viewed the animals they killed "reverentially," as so many mystical ecologists claim, or if they had a more pragmatic attitude toward them, using magic to propitiate a "bison spirit" or "bear spirit" in rituals before and after kills. We would want to know if they really did feel themselves to be absorbed into an all-encompassing "Oneness" with the animals around them, or whether they had any sense of human self-identity that involved feelings of "apartness" from those animals. We would want to know if they really chose not to intervene in first nature any more than was absolutely necessary, as mystical ecologists believe, or if they significantly altered their surroundings. We would want to know if they really did behave toward wildlife as "tender carnivores" in pursuit of "sacred game," as Paul Shepard's evocative book on hunter-gatherer sensibility is titled, or if they held a more mundane attitude toward animals as means for satisfying their very material as well as subjective needs.

Actually, we will never know with certainty the answers to these questions of sensibility. The outlook that today's mystical ecologists cultivate toward the Pleistocene, the Paleolithic, and the Neolithic is often highly romanticized and certainly does not correspond to many things that we do know about those eras. If I am to examine the nature of aboriginal sensibilities, I must do so as honestly as possible and decide which characterizations *probably* apply better to our ancestors of the distant past. This much is clear: much of the archaeological evidence does not support the ecological-romantic view of early peoples, however unpleasant the data may be. Researchers have argued with good reason, for example, that effective human hunters in the Pleistocene may have played a major role in killing off some, if not most, of the great Pleistocene and Paleolithic mammals. Which is not to deny that others have claimed that climatic changes, with important ecological consequences in the Pleistocene and Paleolithic, are more likely to have ended forever the lives of mammoths, mastodons, woolly rhinoceroses, cave bears, and giant sloths, among others.

The argument that the Pleistocene and Paleolithic animals became extinct solely because changes in climate and temperature caused the flora and fauna on which they thrived to disappear has been seriously challenged by a number of responsible researchers. Paul S. Martin, for one, has championed the view that it was prehistoric hunters who caused the "sudden wave of large-animal extinctions" at the end of the Pleistocene, a wave that "involved at least 200 genera, most of them without phyletic replacement."⁴ His largely speculative arguments are based more on the correlation between the extinctions and the appearance of human hunters than on factual evidence. This has led other researchers, like Calvin Martin in his popular *Killers of the Game*, to contend that in North America large mammals such as the mastodon were often so dependent for subsistence on spruce-fir ecosystems that when those ecosystems began to disappear some eight to ten thousand years ago, the animals could no longer sustain themselves.⁵ That a very intelligent mammal like a member of the elephant family would have been limited to such a narrow ecological niche, however, is highly doubtful—and in fact, very recent (1991) evidence from the intestinal remains of a well-preserved mastodon reveals that the animal was quite capable of living on swamplike vegetation in an ecosystem very different from that of a spruce-fir region. In fact, Calvin Martin to the contrary, mastodons were probably quite capable of flourishing in a variety of "ecological niches." Such evidence throws factual weight on the side of the "overkill," as distinguished from the primarily climatic approach, and supports the view that early hunter-gatherers contributed to or may have exterminated many Pleistocene animals.

After so much has been written by romantics of the last century and mystical ecologists today about the "Oneness" that preliterate peoples felt for the game they hunted, should we be shocked by this conclusion? I believe not—unless we choose to simplify the complex dialectic involved in what we regard as an "ecological sensibility," whether that sensibility applies to prehistoric and aboriginal hunters or to ourselves. Indeed, that early hunters—whose "ecological sensibility" is so revered by mystical ecologists—would try to satisfy their needs *in any way they could* should not surprise us. In fact, these hunters were predatory opportunists, no less than wolves or coyotes, *precisely* because they were very much part of "Nature" (to invoke that much-abused word), just as were all the life-forms around them. Early hunters did not live in Disneyland, where sociable "mice" and gleeful "rabbits" jostle with human visitors in a pseudo-animistic, cartoonlike world.

Another area in dispute is the extent to which preliterate peoples altered the wild environments in which they lived. We know that early hunters were clearly not devout conservers of the original forests, for example. As Stephen J. Pyne emphasizes in his informative study *Fire in America*, "the virgin forest was not encountered in the sixteenth and seventeenth century; it was invented in the late eighteenth and early nineteenth centuries. For this condition Indian fire practices were largely responsible."⁶ Hunter-gatherer foragers, in fact, used fire on a global scale to create grasslands for herbivores. The great prairies of the Midwest were literally created by Indian torches, which were systematically applied, long before those lands were expropriated by Europeans. Since humanity's discovery of fire, few forests that we can call "virgin" remain today, however large the girth or height of their individual trees. Great forests of the eighteenth century were often restorations of trees that had been cleared and reduced to parkland and prairies in pre-Columbian times. The "forest primeval" that Longfellow celebrated in his poetry was often made up of trees that European settlers had permitted to come back after Indians had turned the forests and the areas they occupied into parklands. That European settlers permitted the trees to return in order to use them to build ships and homes does not alter the fact that these forests were anything but "primeval," or that Indian communities were anything but reluctant to "tamper" with "Nature."

The wildlife that the grasslands and forests supported were often hunted unrelentingly, sometimes in gross disregard of their dwindling numbers. Long after Paleo-Indians contributed to the extinction of Pleistocene megafauna, their descendants killed elk in "bunches" or groups by hunting down a female "bunch" leader first, then picking off the remaining animals while they haplessly milled around in circles. Countless bison were stampeded off cliffs, corralled in ravines, or otherwise trapped and killed in numbers that seem to have far exceeded what was necessary to

meet the needs of their hunters. Large killings were inflicted wherever possible on elk, pronghorns, mountain goats, and caribou.

My point here should be clearly understood: It is *not* my intention to defame aboriginal hunters or to place their behavior on a par with that of lumber companies or the meat-packing industry. No Paleo-Indian and Indian overkills and deforestation compares even remotely to the terrifying ecological devastation and the genocide practiced by Euro-American settlers on the New World and its native people. The greed and exploitation that has destroyed Indian cultures over the past five centuries can in no way be justified morally or culturally. The interaction of European settlers and Native Americans could have opened a new opportunity for a sensitive integration of both cultures, but that opportunity was lost in an orgy of bloodletting and plunder by European settlers, particularly land speculators, railroaders, lumber barons, and capitalist entrepreneurs generally.

But with all due regard to the many remarkable features of Native American cultures, pre-Columbian hunters took a large toll in wildlife, often showing few, if any, concerns for conservation. From such overkills, game animals took years to regenerate. Nor was this regeneration helped by their hunters' fertility rituals, unless we are to naively believe, like modern believers in magic, that they served to increase animal fertility. "Thanks to their hunting prowess," observes Alston Chase in his superbly researched and well-written book, *Playing God in Yellowstone*, "the Indians of the Yellowstone region—the Shoshone and their cousins, the Bannock and Lemhi—had eaten themselves out of house and home. When Lewis and Clark first met the Shoshone in 1805, they were starving. Their chief told the explorers that they had 'nothing but berries to eat.'"^{6, 7}

I will not dwell further on the recorded instances where overkill by aboriginal hunters denuded large areas of wildlife or burned away "primeval" flora—in short, intervened significantly into "primeval" environments long before technology had advanced much further than a Stone Age tool-kit. It is beyond doubt to me—as it is seemingly not to many mystical ecologists—that prehistoric and preliterate peoples intervened in first nature as fully as they could and often changed it quite profoundly. Their intervention ranged in scope from overkills of wildlife, to the creation of grasslands, and even to the building of cities like Tenochtitlan in Aztec Mexico and terraces in the Andean highlands—all in pre-Columbian times. These are facts that are hardly disputed seriously. Apart from the wishful thinking of romantics and mystics, the differences that surround these facts have more to do with the details or scale of the interventions than with the reality of considerable intervention itself.

But I cannot reiterate my point too strongly. Far from seeking to defame aboriginal peoples, I think we must examine the *rationale* for their

seeming "insensitivity" to animal life and forests. Hunter-gatherers were living beings like other life-forms, and as any life-form would, they tried to survive by any means possible. At the same time, the needs of these humans were greater and more complex than those of other life-forms. As creatures endowed by natural evolution with highly intelligent minds, they would not only have required animal and vegetable food to meet their immediate needs; they would also have wanted a secure supply of food once they knew how to preserve meat and plants. Owing to their *naturally* endowed intelligence, they would have wanted good clothing, even "luxuries" such as comfortable bedding, sturdy skins for homes, plumage and carved bone amulets, beadlike teeth for ornaments, magical artifacts, an assortment of tools and medicines, and coloring matter for various purposes. That the needs of these humans were greater and more complex than those of other life-forms was due not to any perverse traits but to endowments that stemmed from their evolution as unique animals. These wants, in short, shaped their behavior, as it would have shaped that of *any* nonhuman being. And these wants were a product of an intelligence that had been formed as a result of aeons of evolutionary development, not any demonic or mysterious impulse that is vaguely "unnatural."

Inasmuch as preliterate people were human, moreover, they were capable of reasoning conceptually, of speaking fluently, and of feeling abiding insecurities. Early humanity can hardly be faulted for behaving more intelligently than bears, foxes, and wolves; *natural evolution* endowed them with larger brains and a capacity for making tools and weapons to enhance their powers of survival and for changing their environment to abet their well-being. They had amazing memories, and of extreme importance, they possessed vivid imaginations. They decorated their weapons, painted animals and designs on rocks and caves, engaged in analogic thinking, created myths, and felt passions often incomparably more compelling than any that are discernable in animals.

Yet they were also truly part of "Nature." In the late Pleistocene and early Paleolithic, it was their very "closeness" to first nature, coupled with their emerging second nature, that would have caused them to act in ways that contradict our present-day romanticized notions of their behavior. They were undergoing a major transition from the domain of biological evolution to that of social evolution. As such, they could variously exhibit utter indifference to the pain they inflicted on animals and a strong affinity for them in their rituals—contradictory forms of behavior that occurred almost simultaneously. In these respects, their sensibility was shaped by animalistic as well as cultural needs, indeed by their very "Oneness" with first nature. In turn, their sense of "Oneness" with first nature was shaped by a mental repertoire that could make for what we

today would regard as cruelty as well as empathy toward nonhuman life, depending upon the extent to which they identified themselves with it and the kind of society they created, which led to a sense of "apartness" from it—a thoroughly dialectical tension in their outlook.

Allow me to illustrate this point with just one of many examples that can be culled from the anthropological literature. Colin M. Turnbull, a noted anthropologist and the author of an outstanding study of the Ituri forest pygmies in Central Africa, *The Forest People*, celebrates the almost reverential feeling these people genuinely had for their forest habitat. Yet Turnbull was appalled when he discovered that they could be very indifferent to the suffering of captive animals. "The sindula is one of the most prized animals," Turnbull tells us, speaking of a tasty doglike creature that the pygmies had caught in a hunting net. Left in the custody of a pigny boy Maipe, he continues,

the youngster, probably not much more than thirteen years old, had speared it with his first thrust, pinning the animal to the ground through the fleshy part of the stomach. But the animal was still very much alive, fighting for freedom. It had already bitten its way through the net, and now it was doubled up, gashing the spear shaft with its sharp teeth. Maipe put another spear into its neck, but it still writhed and fought. Not until a third spear pierced its heart did it give up the struggle.

It was at times like this that I found myself furthest removed from the Pygmies. They stood around in an excited group, pointing at the dying animal and laughing. One boy, about nine years old, threw himself on the ground and curled up in a grotesque heap and imitated the sindula's last convulsions. The men pulled their spears out and joked with one another about being afraid of a little animal like that, and to emphasize his point one of them kicked the torn and bleeding body. Then Maipe's mother came and swept the blood-streaked animal up by its hind legs and threw it over her shoulder into the basket on her back.

At other times I have seen Pygmies singeing feathers off birds that were still alive, explaining that the meat is more tender if death comes slowly. And the hunting dogs, valuable as they are, get kicked around mercilessly from the day they are born to the day they die. I have never seen any attempt at the domestication of any animal or bird apart from the hunting dog. When I talked to the Pygmies about their treatment of animals, they laughed at me and said, "The forest has given us animals for food—should we refuse this

gift and starve?" I thought of turkey farms and Thanksgiving, and of the millions of animals reared by our own society with the sole intention of slaughtering them for food.⁶

Behavior of this kind and the sensibility it reveals are by no means peculiar to the Iuri forest pygmies. To torture animals—or men and women captives, in intertribal conflicts—was regarded as routine behavior among a large number of preliterate peoples. Pigs were often beaten to death in Oceania; dogs were grossly maltreated by some Indian peoples, who regarded them as a tasty delicacy; and they were often treated harshly by ordinarily gentle Eskimos, as is attested in many reports over decades. Ethnological accounts of animism and magic tell us, in fact, that for many hunting-gathering cultures, second nature was still so deeply immersed in first nature that preliterate people could draw relatively little distinction between themselves and their environments. Not surprisingly, the distinctions between first and second nature were often problematical, with the result that the ability to achieve a clearly defined sense of human self-identity or ego was fairly limited.

In short, we cannot resolve the issue of humanity's "apartness" from first nature by trying to eliminate "apartness" in the course of apotheosizing a Pleistocene "Oneness" or imitating a contrived notion of primordial sensibilities. Looking back to the very beginnings of second nature, it should be emphasized that humanity's consciousness of first nature, as distinguished from a consciousness of its specific, narrow ecological niches, presupposes that it separate itself from a purely nichelike animal existence. Human beings at some point had to at least begin to see first nature generally as an "other" if their self-identity and self-consciousness as human beings were to emerge. Without a sense of contrast between the human and nonhuman, people are limited to the bedrock existence of seeking mere survival, to a way of life so undifferentiated from that of other living things that they know little more than the unmediated confines of their limited ecological community. This way of life is bereft of purpose, meaning, or orientation, apart from what people create in their imagination. And it is a way of life that no human being could endure except by ceasing to think.

Which is to say that, epistemologically at least, differentiation would not exist and the evolution of a human psyche would never get under way. In order for human beings to differentiate themselves in natural evolution, there must be *duality*, such as dualities between self and other and between the human and the nonhuman. Here, duality must not be confused with *dualism*. Today, in fact, the danger that confronts ecological thinking is less a matter of a dualistic sensibility—a dualism that mystical ecologists have criticized to the point of pulverization—but of

reductionism, an intellectual dissolution of all difference into an undefinable "Oneness" that excludes the possibility of creativity and turns a concept like "interconnectedness" into the bonds of a mental and emotional straitjacket. Without otherness, duality, and differentiation, "interconnectedness" dissolves psychological and personal heterogeneity into a "night in which all cows are black," to use one of Hegel's favored aphorisms. The same criticism can be leveled at an ontological reductionism. Without "otherness," duality, and differentiation, all heterogeneity of life-forms would be limited to a deadening homogeneity, and organic evolution could not have occurred. In terms of natural history, the biosphere would indeed still be a "Gaia" covered by Margulis's soup of prokaryotic cells.

Today, to follow a mystical path to "Oneness" is to sink back into the timeless, ahistorical, misty island of the Lotus Eaters, who in Homer's *Odyssey* have no recollection of a past and no vision of a future but vegetate in an unperturbable existence that consists of eating, digesting, and defecating, like animals that live on a strictly day-by-day basis. This is a world that has no sense of "otherness," no sense of self, no sense of consciousness—indeed, no sensibility at all beyond the mere maintenance of life, presumably in the bosom of an equally vacuous "cosmic Self." To understand early sensibilities and their development, we must acknowledge that humanity had to break with the purely animalistic sensibility—if sensibility it can be called at all—that had confined it to a mere ecological niche, if it was to enter into and know the larger world around it. Human beings had to regard first nature as "other," as they inevitably did, however much romantics of all sorts bemoan the loss of a universal "Oneness" in a golden Pleistocene, Paleolithic, or Neolithic past. Given their naturally endowed potentialities, humans had to go beyond a realm of mere survival into one of creativity and innovation, and satisfy their naturally endowed capacity to adapt environments to meet their own needs—in time, hopefully, along rational and ecological lines.

The terrible psychological upheavals produced by the twentieth century have made us truly wary of social history, of "otherness," of the dualities of separation from nonhuman nature. But "separation" and "otherness" are *human* facts of life, if only because natural evolution has produced a life-form—humanity—whose very specificity is premised on a *conscious* sense of "separation" that can increasingly distinguish human from nonhuman reality. "Otherness" must be conceived of as a *graded* phenomenon, to be sure, one that may result in any of several kinds of society. It may eventuate in very destructive relationships characterized by *opposition*, *domination*, and *antagonism*, as we know today—the results of which stain the social history that lies behind us and possibly the precarious future that lies before us.

But "otherness" may also take the form of *differentiation, of articulation, of complementarity, as it did in the early history of humanity*. As human beings began to emerge from first nature, possibly in the Pleistocene and certainly in the Paleolithic, their relationship to animals as "others" was largely *complementary*. Hunters know that they are dealing with a nonhuman "other," but as I emphasized in this book many years ago, animism may have been a form of solicitation rather than coercion. Early animism imparted a cooperative impulse to these cultures, despite the fact that animal spirits had to be propitiated. Game, it was assumed, could then be *lured* to "accept" the hunters' spears and arrows, as Paleolithic cave paintings suggest. Even the overkills of the late Pleistocene and early Paleolithic may have arisen not from a sense of the "other" as an opponent or foe, but from a naïve ignorance of the ecological impact these overkills would have on the great Pleistocene megafauna. In this respect, early hunters merely combined the behavior of an ordinary animal predator with that of an increasingly socialized, animistic human being.

After the climatic vicissitudes that marked the Pleistocene Epoch, the environment became more stable for human beings, and with the beginnings of horticulture, when preliterate people settled into permanent village lifeways, early cultures generally seem to have entered into a remarkably balanced relationship with the flora and fauna around them in the Near East and the Americas. Certainly in the Americas, the marvelous abundance of wildlife and many of the magnificent forests reveal that a fair degree of ecological stability marked Indian cultures when whites made contact with new regions of the Americas. Their sense of "otherness" was probably more consciously benign and complementary, based on differentiation rather than opposition. It was rooted in a simple notion of the world as variegated, diversified, and basically ecological. I may add in passing that it is precisely this latter period upon which the second chapter of this book, "The Outlook of Organic Society," focuses, and not only for the Americas but the early Neolithic Near East.

From that very human recognition of their own selves and of natural differences, however, a variegated social history developed, one that included the emergence of hierarchy. Here, the "otherness" of complementarity was often subverted by emerging status groups and slowly gave way to "otherness" based on domination. But the "otherness" of complementarity and the "otherness" of domination existed together and interacted with each other, so that second nature's evolution began to unfold very equivocally. Despite our rightful wariness of the social history of hierarchy and domination, however, ecologically oriented people today cannot ignore the compelling realities of this social history in its entirety—neither its many blemishes nor the many unfulfilled alternatives that it offered for a better world in the past and present, and hope-

tully, that it will still offer in the future, including reason, science, and technology, with their promise for an ecological society.

Today, we still have to go beyond existing second nature to fulfill the potentiality of combining first and second nature in a new synthesis that I have elsewhere called "free nature." Should this free nature ever come into existence, enriched by the differentiations that mark first and second nature, we could hope to achieve a new sense of "otherness" with first nature that is neither "biocentric" nor "anthropocentric" but complementary—between nonhuman and human—in a richly articulated unity drenched in the sunlight of evolution, not submerged in the darkness of a mythic Pleistocene or a "Gaian" soup of simple unicellular organisms.

Let me to sum up my views quite explicitly. I regard it as a form of ahistorical arrogance, so characteristic of recent times, to look back at preliterate peoples' behavior and cast it in forms that suit modern standards of ecological morality, or respond with pious disappointment to their cruelty or indifference to other living beings. It is a form of modern ahistorical arrogance to expect that they would *not* use their environments up to the hilt or change them as they needed to. What we should properly ask, if we are not to sink into the fatuities of romanticism and mysticism, is not whether humans *should* intervene into nature—for nothing will stop them from trying to fulfill their most basic "natural" potentialities—but *how* they should intervene and toward what ends. These are really the profoundly ethical questions that we must ask, and they can only be answered in a *thinking* way—by unscrambling the virtues and vices of humanity's social development, by determining if evolution has any meaningful thrust toward increased subjectivity and consciousness in the great evolutionary parade of life-forms, and by bringing greater mind to bear on the pivotal role of social development in all of these issues.

That many of us, including important thinkers in past generations, have the luxury of questioning hierarchical society's interaction with "Nature," including human nature itself, is the result not of a newly discovered affinity we have with animal life, valid as this affinity may be. It arises mainly from our growing sense of *humanity*, our enlarged sense of humanistic empathy with nonhuman life-forms, not to speak of other human beings. I cannot emphasize too often that no life-forms seem to be capable of sharing our empathic sentiments, except where parental care is involved, and possibly for members of the pack, herd, or band to which they belong. Allowance can also be made for sentiments of affinity that some animals feel for the humans who care for them as pet-owners or shepherds. And to use a word like *empathy* for such cases can only be done in a very anthropomorphic manner, on the

dubious assumption that instinct, habit, and conditioned reflexes do not play a major role in forming "empathetic" animal behavior.

As for the sentiments of empathy, care, and concern that humans extend so broadly to multitudes of living species, indeed to "Nature" as a whole, let me emphasize again that these sentiments are not to be found in first nature. Animals have no idea of what "Nature" is, any more than did our early ancestors, who were too immersed in it to grasp the natural world as a totality or a vast "otherness," if you will. They could see little beyond their particular ecological niche and the beings that shared it with them. Moreover, if human sensibilities do not draw a distinction between humanity and "Nature," if they do not attain the self-definition, self-consciousness, and self-fulfillment for which people have been equipped by natural evolution, they will always lack the empathy, care, aesthetic appreciation, and affinity for first nature that the ecological movement demands of them. Nor could humans have ever become moral agents who can *know* first nature and appreciate it, much less create a free nature that creatively absorbs the best of first and second nature into a realm of social wholeness and ethical complementarity.

The attainment of free nature will involve neither the "re-enchantment," the "redivinization," nor the mystification of "Nature," whether by means of John Muir's inverted Calvinism, Starhawk's magical arts, Gregory Bateson's cybernetics, or "deep" ecology's appeal that we dissolve our "selves" into a "cosmic Self." Nor will free nature be attained by a professorial, or by essayists, poets, anthropologists, and ecological evangelists who tap out encomiums to hard work and the "simple life" on their word processors. The moral cant that marks the recent reworking of the ecology movement into a wilderness cult, a network of wiccan covens, fervent acolytes of Earth-Goddess religions, and assorted psychotherapeutic encounter groups beggars description. For all their talk about "self-empowerment," theistic "immanence," "care," and "interconnectedness," such mystics actually manage to navigate themselves away from the serious social issues that underlie the present ecological crisis and retreat to strategies of personal "self-transformation" and "enrichment" that are predicated on myths, metaphors, rituals, and "green" consumerism.

A respect and love for first nature has no need for such artifices, artifacts, atavistic practices, or romantic somersaults, much less the growing number of misanthropes whose love of nonhuman life often seems to stem from a detestation of human life. Natural evolution, given its marvelous creativity, its fecundity, its growing subjectivity, and its capacity for innovation, deserves our respect and love for its own attributes. We do not have to create ideological artifacts like deities—female or male—or use magical arts to appreciate first nature as a wondrous phenomenon—including such wonders as the human mind and humanity's capacity to act morally and self-consciously. An appreciation and love of first nature

should properly stem from a clear-sighted and aesthetic naturalism, not from a Supernaturalism, with its projection of sovereign humanlike "beings" into the biotic world and its canny use of terms like *imminence* and "earth groundedness." Indeed, whether we truly know and fully appreciate first nature depends very much on having the intellectual and emotional ability *not* to confuse ourselves as human beings with coyotes, bears, or wolves, much less with insensate things like rocks, or rivers, or even more absurdly, with the "cosmos."

Whether this clear-eyed naturalism will become prevalent in the present-day ecology movement is now very much in doubt. One can easily understand and fully appreciate women's resentment of Judeo-Christian patriarchalism, militaristic belief-systems, and the neglect of their identity by a male-oriented world. But for women, or men for that matter, to react to these social and psychological pathologies by adopting a neopagan mysticism, an "all-loving" pantheism, or a barely concealed matriarchalism is to replace one body of errors by another, and possibly one social and psychological tyranny by another. Falsehoods and dogmatic beliefs, however benign they may seem at first glance, inevitably imprison the mind and diminish its critical thrust. They presuppose and foster a proclivity for faith, whose arbitrary nature renders their acolytes easily manipulable by assorted New Age gurus, priests, priestesses, witches, and orchestrators of mass culture.

For early hunters themselves, their animistic sensibility was a mixed blessing. Clearly, it featured a cooperative spirit in their relations to animals as "others," and it certainly alerted hunters to the attributes of the animals they stalked. Nevertheless, however much preliterate peoples' animism includes a cooperative dimension, we know today that insofar as it rests on a belief in spirits or a Supernature, it clearly rests on a false image of the natural world. Besides boxing them into inflexible customs and traditions, animism involves an innocent belief in magic that rendered aboriginal peoples very vulnerable to technology, particularly the weaponry, of Europeans who awed them or, with their bullets, bloodily disabused them of the spells with which their shamans had "protected" them.

To believe that animism has any objective reality, as many mystical ecologists suggest, is simply infantile, not unlike the behavior of a child who angrily kicks a stool when he or she falls over it. In view of what we know today about first nature, animistic souls and magical methods have no more basis in objective reality than the visions that many North American Indians traditionally induced in themselves by fasting, self-torture, auto-suggestion, and similar techniques that distort the human sensorium. In a preliterate community, inducing a vision of a guardian spirit by warping one's senses might enhance one's own sense of self-worth, courage, and bravado, thereby making one a better hunter, but

these visions tell us no more about the reality of first nature than Castaneda's tales about talking animals. Mythic knowledge and the belief in magic, so important to animism, are a self-delusion—one that is understandable as the beliefs of preliterate peoples, but among modern people they are explicable only as evidence of the extent to which they are removed from reality, indeed, the extent to which they lack authentic "earth wisdom."

Given the growth of ritual as part of the ecology movement and particularly ecofeminism, we would be wise to realize that ritualistic behavior can render people easy to control for many dubious ends. That there are desirable rituals that ease our transitions into different age groups and that prepare us for new responsibilities in life, cement communities, alleviate our sense of loss for the dead, reinforce human solidarity, and even express respect for nonhuman life—all of these are forms of behavior that social ecology readily acknowledges.

But ritualistic behavior must be practiced knowingly, indeed, more so today than has ever been the case in the past because the mass media have made us terribly vulnerable to new methods of social control. Our need for all the critical faculties we can muster is heightened by the enormous magnitude of the ecological problems we face. If rituals are used to a point where they foster a noncritical approach to reality or create an illusory substitute for it; if magical trickery becomes a substitute for a rationally explicable kind of causality; if new shamans apply their nostrums to the most intimate areas of life so that it is they, not us, who determine our behavior, the participant can easily become a malleable object rather than an autonomous subject—ironically, I may add, in the name of attaining a "new," "collective," "cosmic," or "ecological" subjectivity. Participants in a ritual of "interconnectedness" who come to believe that that they are "trees," for example, engage in an act of blatant self-deception that may easily diminish their self-identity. The potential damage caused by this loss of ego boundaries is all the more frightening because selfhood is already being weakened and rendered passive by a highly commodified society. Thus, although ritual can be used to alleviate many transitional crises in life, it can also be used very effectively to take over life, to freeze it in manufactured "traditions," and not unlike the Nazi rituals at Nuremberg, indoctrinate and totally subjugate the individual to a new political and psychological tyranny.

The generous utopian ambience that surrounded the ecology movement of the 1960s, with its concern for people as well as the biosphere, is steadily giving way to a dystopian bitterness and misanthropy. Ecology is seriously faced with the danger that it will become mean-spirited and arrogant in its treatment of genuinely denied people. For all their celebrations of "Mother Earth," mystical ecologies generally deal with "her" as though "she" had withered breasts and had lost "her" powers

of reproduction. Often knowingly, this tendency in the ecology movement has all but abandoned the commitment of authentic radical movements—socialist and anarchist alike—to human happiness. Radical ecology's earlier confrontational stance toward capitalism and hierarchical society has been increasingly replaced by cries against "technology" and "industrial society"—two very safe, socially neutral targets against which even the bourgeoisie can inveigh in Earth Day celebrations, as long as minimal attention is paid to the social relations in which the mechanization of society is rooted. Radical criticisms of the patently class-biased views of Thomas Malthus are being replaced by anguished cries about the "population problem," as though modern capitalism, given its competitive market economy, would not ravage the planet even if the world's population were reduced to a fraction of its present numbers. The political vigor of the earlier ecology movement is being sapped by religious or quasi-religious cults, an encounter-group mentality of the "personal as political," and mystical vagaries as a substitute for serious reflection and social analyses.

The popularity of "biocentrism," in turn, threatens to trivialize humanity, particularly its capacity for moral agency in "Nature"—ironically, the very intellectual and psychological capacity that is essential to develop a "biocentric" outlook. Aside from the misanthropy that this trivialization nourishes, the eminently ethical demands of "biocentrism" spin on a form of ecological circular reasoning. "Biocentrists" cannot assign human beings an imperative for ethical behavior that they do not assign to all other life-forms, and simultaneously insist that humans are "equal" to other life-forms in terms of "inherent worth." Moreover, even if a "biocentric" society were to emerge, it would be obliged to "intervene" massively in first nature with nearly all the sophisticated technologies it has at its disposal to correct ecological dislocations on a scale that would leave the more purist "deep ecologists" utterly aghast.

The very notion of "equality," as I have argued in chapter 6 in this book, even when applied to human beings alone ignores individual differences in intelligence, talent, age, health, physical infirmity, and the like. Predicated as it is on the notion of justice, "equality" compares poorly indeed with the notion of complementarity, predicated as it is on freedom. A free society in which an ethics of complementarity prevails would make every attempt to compensate for the unavoidable inequalities in physical differences, degrees of intellectuality, and needs among individual human beings. The notion of "equality" is even more inappropriate when it is intended to encompass the nonhuman world as well; differences among species vary far more widely than they do among individual humans. Any form of "equality," including those among humans, that fails to account for differences produced by the "natural inequities" of age, physical capacities, and subjective differen-

ces in the nonhuman world would be truly lacking in the empathy that underpins "biocentric" attitudes. "Biocentrism," to put the matter bluntly, is as primitive and unsatisfactory ethically as "anthropocentrism."

Complementarity and wholeness, which social ecology substitutes for "biocentricity," "anthropocentricity," "ecocentricity," and other "centricities" that plague us today rest on the notion of "otherness" and the differentiations it presupposes. I have tried to present a fairly nuanced account of the interplay or dialectic between complementarity and conflict in organic society in the opening chapters of this book and, in later chapters, their interplay in ancient, medieval, and capitalist societies, as well as the very important issue of how hierarchy emerged.

But *The Ecology of Freedom* is not only an account of the emergence of hierarchy. As its subtitle indicates, it is also an account of hierarchy's dissolution—not only as a process of realizing an ecological society in the future but in part, at least, as a history of the early uprisings and radical ideas of the dominated strata that sought to undo rule by the elites that oppressed them. In this history there is a very special drama to which the reader's attention should be drawn. I refer to the wealth of historical alternatives that oppressed strata formulated and often even brought into being for a time to create free societies for themselves. We must not permit these alternatives to be discarded; far from belonging to the dustbin of history, they should be seen as a treasure trove of discernible institutions, experiences, and experiments, as well as imaginative ideas that never saw the light of day—a treasure that we must eagerly keep alive for the future.

The irreducible minimum, the equality of unequals, and the ethics of complementarity that emerged in organic societies (see chapter 2) are imperishable standards for freedom, albeit standards that must be extended beyond parochial group, band, and tribal bonds. The Greek notions of limit and balance in terms of needs and the Athenian institutions of direct democracy are also imperishable standards, albeit standards that must be divested of patricentricity, slavery, exclusionary forms of citizenship, and the high premium the Greeks placed on the arts of war. Christianity's vision of a universal *humanitas*, for all the defects of the Church, must always be a guiding principle, albeit without any notion of a Supernature to support it. The principle of confederation, so prominent in late medieval cities, as opposed to the nation-state, also belongs to the repertoire of freedom that we can cull from the past, albeit without the patriciates that ruled many cities in the late Middle Ages. It is not atavistic to cull from history the ways in which people developed humanistic lifeways and realistic institutions that could provide workable examples for developing a free society.

To create a society based on differentiation, wholeness, and complementarity, rather than any "centricities" our ideas must be concrete and avoid the diffuseness that is so characteristic of the mystical tendencies in the ecology movement. I have examined in detail what an ecological and rational society might be in a number of my works, including the present one—and I have tried to offer a concrete, almost programmatic project for our times. I have called this project "libertarian municipalism." It is "libertarian" (a term created by nineteenth-century European anarchists, not by contemporary American right-wing proprietarians) in that it advances a new politics of popular control over the material means of life—land, factories, transport, and the like. It is "municipalist" in that it advances a new politics of civic control over public affairs, mainly by means of direct face-to-face citizen assemblies. It is also confederalist, in that it seeks to foster the interdependence of municipalities and their economies on a regional basis—partly to avoid the parochialism of "self-sufficient" communities, which can easily become ingrown and self-aggrandizing; partly to deal with the need to coordinate the operations of these communities in a rational and ecological manner. Policy decisions are initiated, formulated, and decided upon by the citizen assemblies of the municipalities; administrative decisions, subject to careful oversight by the municipalities, are made by mandated, recallable delegates to confederal councils.

Libertarian municipalism, potentially a very significant form of public life today, has a long historical pedigree in cities from the Middle Ages well into the nineteenth century. It was practiced with varying degrees of democracy to countervail emerging centralized nation-states. Libertarian municipalism today seeks to recover and render viable the original Hellenic meaning of the term *politics*—the management of the *polis's* affairs by means of a truly participatory democratic body of institutions.

The prospect of making such a politics viable today is as plausible as it is necessary. Traditional socialist and anarcho-syndicalist policies of developing a class movement based on proletarian interests that presumably would emerge as a general interest against capitalism have failed beyond any hope of recovery. Capitalism has developed to a level where it has almost completely absorbed the class war envisioned by Marxists and syndicalists. If any general interest can emerge today, it is one that will be shaped by external forces—notably, the ecological limits of an economy that must, by its very nature, "grow or die," thereby endangering the biosphere itself. And if any radical movement for social change and an ecological balance between second and first nature can be achieved, it must be based on a participatory democracy, rooted in a politics of gradual confederalism—the step-by-step formation of civic networks that can ultimately challenge the growing power of the nation-state.

In the vocabulary of past radical movements, this new power would be a "dual" power—a power that, owing to its ability to form a transclass general ecological interest, can face with growing confidence and moral authority the nation-state's monopoly of force. Here the dangers of parochialism that might follow on the heels of decentralization can be reconciled by confederalism. A direct democracy, in turn, avoids the corruptive "politics" produced by political professionalism, bureaucracy, and top-down representative systems of governance. Citizenship, expressed through popular assemblies, can avoid a statist "politics" based on the privatized anonymous "constituent" who exercises no control over his or her social life.

This is not the place to explore the traditions, practices, and prospects associated with libertarian municipalism—the institutions, economies, and interrelationships between civic and confederal bodies, and the new kind of citizen and politics that this system of self-governance involves. The most complete statement of these ideas can be found in my book *The Rise of Urbanization and the Decline of Citizenship*.⁹ Suffice it to say here that this political and economic solution to our current problems is also an ecological solution. The private ownership of the planet by elite strata must be brought to an end if we are to survive the afflictions it has imposed on the biotic world, particularly as a result of a society structured around limitless growth. Free nature, in my view, can only begin to emerge when we live in a fully participatory society literally free of privilege and domination. Only then will we be able to rid ourselves of the idea of dominating nature and fulfill our promise for acting as a moral, rational, and creative force in natural as well as social evolution.

Looking over *The Ecology of Freedom* today, I would emphasize the lines I wrote on page 20 that celebrate humanity's capacity to alter the world in a way that combines "a scientific discipline"—ecology—with "the indiscipline of fancy, imagination, and artfulness." The current emphasis by mystical ecologists on nonintervention or minimal intervention by humanity in first nature—the maxim, "let nature take its course"—is completely untenable. Rather, I would ask the reader to consult my quotation of Charles Elton: "The world's future has to be managed, but this management would not be just like a game of chess—[but] more like steering a boat." Today, I would emphasize that while the world cannot be dealt with like a game of chess, it nevertheless does, as Elton points out, have to be "managed." If we do not intervene in the world today for purposes of ecological restoration, the management of wild areas, and reforestation, neither we nor the wildlife we wish to conserve is likely to have any future at all. We have gone beyond a so-called "primeval" world, to a point where the possibility of returning to it is simply excluded. And in many respects we have developed new

sensibilities, however marginal they may be today, that are even more advanced than those of our early ancestors.

I would also emphasize my insistence on Hegel's famous maxim, "The True is the Whole" (page 32), and in my insistence on combining our changes of the natural world with the "spontaneity" of first nature. My concern with ecological stability as a function of "unity in diversity" and complexity, however, requires an explanation. The ecological consciousness of the fifties and early sixties, to the extent that there was one, was obliged to advocate ecological stability as a product of crop variety to avoid the use of dangerous pesticides so heavily used in the kind of single-crop monoculture that was—and still is—practiced by agribusiness. Only by playing insect and other animal populations against one another in variegated agricultural situations did it seem possible to reduce or eliminate the use of dangerous chemicals.

Today, my emphasis on diversity and complexity rests on much broader grounds. A diversity of species, in my view, is vitally important because it opens new pathways for the evolution of life. Ecocommunities with more species are usually more complex; they tend to give rise to new, more subjective and more flexible life-forms that in turn open greater evolutionary possibilities. I have discussed this phenomenon, which I call "participatory evolution," in my 1986 essay "Freedom and Necessity in Nature."¹⁰

I am satisfied that chapter 2, "The Outlook of Organic Society," is substantially sound as it stands today. It is admittedly a polemical chapter, written to countervail the standard image of preliterate cultures as "savage" by emphasizing their benign aspects. I wanted to shatter this ugly image of preliterate peoples and explore more fully the ancestral sources of values like care, nurture, and early humanity's subjectivization or personalization of "Nature." But given the romantic mystification of preliterate societies so very much in vogue today, I should point out that preliterate cultures have—or had—no compunction about intervening significantly in the natural world; indeed, many of their rituals and magical practices were spiritual means to facilitate their acts of intervention. I can only hope that this introduction helps to provide a more balanced account of the Wintu and Hopi Indians, the Iñatmiut Eskimos, and the other preliterate peoples to whom I refer in the book, as active agents in changing first nature.

I would also want to frame my discussion of complementarity in organic society in terms of this introduction's discussion of "otherness." Preliterate people, as they emerged from an awareness of their particular ecological niches into that of a larger sense of first nature, were not oblivious to the fact that the world around them, the game that they hunted, and the plants that they cultivated, may have been highly personalized but were also "other" than human. But this was not initially

a view of the "other" as an opponent, much less one that had to be subjugated. It was based on a simple notion of the world as variegated, diversified, and basically ecological, as I have pointed out earlier. While we must carefully advance to a worldview that has a complementary notion of "otherness" rather than a conflictual one, it must have secular and rational underpinnings: a "quasi-animism," if you like, that is based on a respect and appreciation for the continuity of life rather than spirits or the myth of a Supernature.

The most potentially misleading passages in chapter 2 appear on pages 60-61, where I evoke the symbolism of a "Mother Goddess [as] a fertility principle so old in time that its stone remains have even been found in Paleolithic caves and encampments" (page 60). Let me emphasize that nowhere in this passage do I refer to "her" as an *Earth Goddess* or as a *pantheistic* female presence in the world. Nor do I identify "her" with first nature. My characterization of this "Mother Goddess" as the expression of "the fecundity of nature in all its diversity" (page 92) still refers to a fertility principle, not an organized religion with its panoply of priestly corporations. The vegetation goddesses that emerged, as part of full-blown religions with temples often managed by priests, are not equivalent to earlier, generalized fertility principles. These new female agricultural deities, in fact, were easily placed in the service of hierarchy, not organic egalitarian societies. Such goddesses and the priestly elites who gorged on the wealth they accumulated in goddess-oriented temples were no blessing for women, much less for oppressed people who toiled in "her" behalf.

At no point in my discussion did I suggest that we can return to aboriginal lifeways. In fact, I was at pains to warn against any belief that we can—or should—do so. If we are to achieve an ecological society in the future, it will have to be enriched by the insights, knowledge, and data we have acquired as a result of the long history of philosophy, science, technology, and rationality—cleansed of magic, the worship of deities, and primeval religions. Nor can we push our history aside. Rather, we must absorb what is ethically and intellectually valuable in it and discard what is ethically harmful. We should avoid superstition, incipient hierarchy, and a hierarchical sensibility of any kind.

I would want to revise nothing in chapter 3, "The Emergence of Hierarchy." My treatment of the immanent, indeed dialectical *origins* of status relations in early society has stood up beyond my greatest expectations, as recent data indicates. I would only note that all the evidence I could call gives chronological priority to the emergence of gerontocracies over patriarchies, and that shamans usually played a sinister role in most tribal societies. Attempts by some ecofeminists to recycle my discussion of the development of hierarchy to view patriarchy as the *sole* origin of domination are spurious and self-serving. Indeed, as Janet

Biehl has shown so clearly in *Finding Our Way: Rethinking Ecofeminist Politics*, hierarchy assumed such a large variety of forms over time, including forms in which men dominate men, that to single out patriarchy as the exclusive and most abiding source of hierarchy verges on the nonsensical. I was at pains, moreover, to quote E. R. Dodds on page 120 to the effect that the patriarch had enormous power over the male members of the family as well as the female. In patriarchal families both women and men could be dealt with arbitrarily and cruelly, at times even by "matriarchs" like Sarah, who induced Abraham to drive his concubine Hagar and their son Ishmael into the desert. It should be noted that in quoting Max Horkheimer and Theodor Adorno's sentimental passage on page 121 of the book, to the effect that woman is the "image of nature" and a "key stimulus to aggression"—a passage that has found favor with more informed ecofeminists—I strongly qualify their remarks by a footnote that emphasizes women's outstanding role in the early domestic economy around which preliterate society was structured, and its enormous importance in social development.

My distinction between justice and freedom in chapter 6, "Justice—Equal and Exact," is as firmly rooted as ever these days. It is a discussion that acquires special significance in view of "deep ecology's" naïve endeavor to attribute "equality" to all species in a "biocentric democracy." Chapter 7, "The Legacy of Freedom," continues to be as relevant as ever for our time. Gnosticism as an emancipatory ideology is less attractive to me now than it is to many mystics and ecofeminists who, once they learn that the Gnostic "Sophia" was a woman, are ready to embrace unthinkingly all the strictures of this highly dualistic, even sinister religion. I am at pains to note: "Gnosticism must be dealt with very prudently before any of its tendencies are described as a Christian 'heresy.' In its Manichean form, it is simply a different religion, like Islam or Buddhism. In its Ophite form, it is a total, utterly anarchistic, inversion of Christian canon" (page 180). I hold no brook for Gnostic elitism, dualism, or in Marcion's form, its asceticism and amorality (pages 182-83). The point I tried to make in my dialectical treatment of Gnosticism was to elicit its anarchistic and critical thrust, a problem that must be situated in the historical context and development of this religion, not by treating it as an ahistorical and consistent dogma that never underwent any changes in different times and places.

There are no significant changes that I would make in the remaining chapters of the book. That I treated Hebrew transcendentalism unsatisfactorily by failing to emphasize that it sharply distinguished the "eternality" of "Nature" from the "mutability" of society, thereby opening society to the possibility of radical, even revolutionary changes for the first time in history, is a well-deserved criticism. I made this important point only in passing, when I quoted H. and H. A. Frankfort's observa-

tion that Hebrew transcendentalism led to a "revolutionary and dynamic teaching" by postulating "a metaphysical significance for [social] history and for man's actions" (page 104). It thereby freed human thought and practice from the unchangeable, indeed necessitarian world of "Nature," its domain of eternal recurrence, and its paralyzing deities. Again, Janet Biehl has provided an invaluable corrective for this omission.¹¹

Chapter 11, "The Ambiguities of Freedom," which I regard as the most important in the book, is singularly appropriate today. Its argument for an ecologically oriented rationality, science, and technics could stand rereading by any thoughtful individual. Only one caveat should be noted: my criticisms of Horkheimer and Adorno are too gentle. Despite their word-magic, I do not feel that their ideas have the applicability to our times that so many Frankfurt School admirers would have us believe. *The Dialectic of Enlightenment* is a very enchanting work, but it fares poorly as a defense of reason; nor does it have a clear sense of direction in its treatment of reason. In retrospect, I do not find it accidental that it has been picked up by many postmodernists, together with Adorno's wayward writings, as a precursor of the high-culture nihilism that is very much in vogue today. Chapter 12 deals, of course, with "An Ecological Society," and the "Epilogue" advances the fundamentals of a nature philosophy and a naturalistic ethics. Lest this portion of the book be misunderstood, I point out that we cannot return to an idyllic "Garden of Eden" (page 349) and that reason "must be permitted to stake out its own claim to a libertarian rationality" (page 353). But the reader should be aware that I permitted myself to use many words for strictly evocative purposes, in the hope that I could combine theoretical insights with metaphors that were meant to reach the reader's emotions. My almost animistic remark that "nature is writing its own natural philosophy and ethics" is to be understood as a string of metaphors. "Nature" really does what it does "best"—develop, diversify, and produce increasingly complex phenomena. Despite my quotations from Lynn Margulis's discussion of the active role that life plays in creating its environment, I nowhere accept—and today, I firmly reject—her commitment to a variant of the "Gaia" hypothesis, which sees the planet as a single organism.

In closing, let me restate my plea that the reader examine the original introduction that follows. Despite the fact that it overlaps with the present introduction, within a span of a few pages it provides the essential outlines of social ecology.

The ecology movement will never gain any real influence or have any significant impact on society if it advances a message of despair rather than hope, of a regressive and impossible return to primordial human cultures and sensibilities, rather than a commitment to human progress and to a uniquely *human* empathy for life as a whole. I can

easily understand why despair exists among many mystical ecologists—indeed, in the environmental movement generally—over the impact of a grow-or-die capitalistic economy on the biosphere and on the human psyche. While a patronizing, quasi-religious, often misanthropic ecology that denigrates the uniqueness of human beings and the wondrous role they can play in natural evolution may be an understandable response to that economy, it is a denial of humanity's most human potentiality: the ability to change the world for the better and enrich it for virtually all life forms.

We must recover the utopian impulses, the hopefulness, the appreciation of what is good, what is worth rescuing in human civilization, as well as what must be rejected, if the ecology movement is to play a transformative and creative role in human affairs. For without changing society, we will not change the disastrous ecological direction in which capitalism is moving. Spiritualistic movements have been at work in human history for thousands of years. They have doubtless changed the thinking and behavior of many people. But rarely, as the history of all the great world religions attests, have they created an ecologically humanistic society. This kind of society will never be achieved without ideas that confront the material as well as spiritual conditions of life, indeed, of public life as well as private life.

May 20, 1991

NOTES

1. Murray Bookchin, *The Rise of Urbanization and the Decline of Citizenship* (San Francisco: Sierra Club Books, 1987). To be published in paperback by Black Rose Books under the title *Urbanization Without Cities* in 1991; *Revolving Society* (Montreal: Black Rose Books, 1989; Boston: South End Press, 1990); and *The Philosophy of Social Ecology: Essays in Dialectical Naturalism* (Montreal: Black Rose Books, 1991). "Thesis on Libertarian Municipalism," *Green Perspectives*, P.O. Box 111, Burlington, VT 05402.
2. Arthur O. Lovejoy and George Boas, "Some Meanings of 'Nature,'" in *Primitivism and Related Ideas in Antiquity* (Johns Hopkins, 1985; reprinted, New York: Octagon Books, 1965).
3. Janet Biehl, *Finding Our Way: Rethinking Ecofeminist Politics* (Montreal: Black Rose Books, 1991); published in the United States under the title *Rethinking Ecofeminist Politics* (Boston: South End Press, 1991).

4. Paul S. Martin, "Prehistoric Overkill," in *Pleistocene Extinctions: The Search for a Cause*, ed. P. S. Martin and H. E. Wright, Jr. (New Haven: Yale University Press, 1967), p. 75.
5. Calvin Martin, *Keepers of the Game: Indian-Animal Relationships and the Fur Trade* (Berkeley: University of California Press, 1978), pp. 169-71.
6. Stephen J. Pyne, *Fire in America* (Princeton: Princeton University Press, 1982), p. 71.
7. Abston Chase, *Playing God in Yellowstone: The Destruction of America's First National Park* (New York: Harvest/Harcourt Brace Jovanovich, 1986, 1987), p. 104.
8. Colin M. Turnbull, *The Forest People: A Study of the Pygmies of the Congo* (New York: Clarion/Simon and Schuster, 1961), pp. 101-102.
9. Bookchin, *The Rise of Urbanization*.
10. Bookchin, "Freedom and Necessity in Nature," *Alternatives* 13 (November 1986); re-published in Bookchin, *Philosophy of Social Ecology*.
11. Biehl, *Finding Our Way*, pp. 60-66.